



CITY OF KIRKLAND

Planning and Community Development Department

123 Fifth Avenue, Kirkland, WA 98033

425.587.3225 ~ www.kirklandwa.gov

**MODIFICATION OF AN EXISTING WIRELESS FACILITY
SUMMARY--PLANNING OFFICIAL DECISION**

File: WIR15-01159

Address: 2000 CARILLON POINT

Project Name: SB13 CARILLON POINT Eligible Facility Modification

Applicant: Jesse London of Ryka Consulting, for AT&T

Proposal: The wireless facility was originally approved as a land use permit ZON11-00030. AT&T currently has 9 flush-mount antennas on the existing rooftop penthouse, along with ancillary equipment and a rooftop mounted equipment enclosure. This modification allows: removal of 4 existing flush-mount antennas; the installation of 4 flush-mount antennas; minor equipment additions within the existing cabinets. The modification does not increase the total number of antennas from 9 antennas to 9 antennas (see Attachment 1).

Project Planner: Christian Geitz *CG*

Date: 7/15/2015

Decision: ☐ Denied
☒ Approved with the following conditions:

I. CONDITIONS OF APPROVAL

- A. This application is subject to the applicable requirements contained in the Kirkland Municipal Code, Zoning Code, and Building and Fire Code. It is the responsibility of the applicant to ensure compliance with the various provisions contained in these ordinances.
- B. The antennas and any visible mounting brackets and/or cables shall be painted to match the building facade color.
- C. The maximum size for equipment structures in residential zones is 5 feet in height and 125 square feet in area. The maximum size in non-residential zones is 10 feet in height and 240 square feet in area.
- D. The proposed equipment structure shall comply with the noise standards found in KZC Section 117.70.9 & 115.95.
- E. All personal wireless service facilities (PWSF) must meet or exceed current standards and

regulations of the FAA, the FCC and any other agency of the Federal Government with the authority to regulate PWSF. If such standards and regulations are changed, then the owners of the PWSF governed by this chapter shall bring such PWSF into compliance with such revised standards and regulations in accordance with the compliance deadlines and requirements of such standards and regulations. Failure to bring PWSF into compliance with such revised standards and regulations shall constitute grounds for the removal of the PWSF at the owner's expense (KZC 117.65.14).

- F. In the event the use of any PWSF will be discontinued for a period of 60 consecutive days, the owner or operator shall so notify the City in writing, and the PWSF shall thereafter be deemed to be abandoned. Determination of the date of abandonment shall be made by the City which shall have the right to request documentation and affidavits from the PWSF owner or operator regarding the issue of PWSF usage. Upon such abandonment, the owner or operator of the PWSF or the owner of the property upon which such facility is located shall have an additional 60 days within which to:
1. Reactivate the use of the antenna or transfer the PWSF to another owner or operator who makes actual use of the PWSF; or
 2. Dismantle and remove the PWSF. If such PWSF is not removed within said 60 days from the date of abandonment, the City may remove such PWSF at the facility owner's and property owner's expense.

At the earlier of 60 days from the date of abandonment without reactivation or upon completion of dismantling and removal, City approval for the PWSF shall automatically expire.

- G. The wireless facility cannot be electronically connected to power and/or the electrical permit cannot be approved until the Planning Department has completed a final inspection of the facility and signed off on the permit.

II. ELIGIBLE FACILITY MODIFICATION

- A. The site is located in the PLA 15A zone, which is a non-residential zone as defined in KZC 117.15.

- B. General / Applicability -

The application was received on June 5, 2015. The application was deemed complete on June 18, 2015.

- C. The request has been reviewed as an Eligible Facility Modification under Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012, 47 U.S.C. Section 1455(a). The modification does not substantially change the physical dimensions of the existing base station or defeat existing concealment technology (see Attachment 2).

III. DECISION OF PLANNING OFFICIAL

I approve the modification as proposed. The conditions of approval are found at the beginning of this report.

IV. SUBSEQUENT MODIFICATIONS

Modifications to the approval may be requested and reviewed pursuant to the applicable modification procedures and criteria in effect at the time of the requested modification.

V. APPEALS

The following is a summary of the deadlines and procedures for appeals. Any person wishing to file or respond to an appeal should contact the Planning Department for further procedural information.

KZC 117.95 allows the applicant to appeal a Planning Official decision to the Hearing Examiner. The appeal must be in writing and must be delivered, along with fees set by ordinance, to the Planning Department by 5:00 p.m., July 29, 2015, fourteen (14) calendar days after the date the Planning Official's decision was mailed or otherwise delivered to the applicant.

VI. LAPSE OF APPROVAL (KZC 117.100)

The applicant must begin construction or submit to the City a complete building permit application for the development activity or other actions approved under this chapter within five (5) years after the final approval of the City of Kirkland on the matter, or the decision becomes void; provided, however, that in the event judicial review is initiated per KZC 117.95, the running of the five (5) years is tolled for any period of time during which a court order in said judicial review proceeding prohibits the development activity or other actions.

The applicant must substantially complete construction for the development or other actions approved under this chapter and complete the applicable conditions listed on the notice of decision within seven (7) years after the final approval on the matter or the decision becomes void.

VII. APPENDICES

Attachments 1 through 2 are attached.

1. Applicant's Proposal
2. Response to Substantial Change Criteria



at&t
Your World. Delivered.

SB13 CARILLON PT

2000 CARILLON POINT
KIRKLAND, WA 98033
KING COUNTY

RFDS REV: 6.0
RFDS DATE: 12/19/14

PROJECT SUMMARY

PROPERTY OWNER: CARILLON PROPERTIES
ADDRESS: 3240 CARILLON POINT
KIRKLAND, WA 98033
NAD83
LATITUDE: 47° 39' 22.5" N
LONGITUDE: 122° 12' 25.3" W
TOP OF STRUCTURE: ±67'-7" AGL
BASE OF STRUCTURE: ±21.3' AMSL

CODE INFORMATION:
ZONING CLASSIFICATION: COMMERCIAL (PLA 15A)
BUILDING CODE: IBC 2012
CONSTRUCTION TYPE: IIB
OCCUPANCY: S-2
JURISDICTION: CITY OF KIRKLAND
PROPOSED BUILDING USE: TELECOMMUNICATIONS

PARCEL INFORMATION:
PARCEL NUMBER: 1725059058
AREA OF PARCEL: ±494,841.60 SQ. FT. (±11.36 ACRES)
PROJECT AREA: ±152 SQ. FT. (EQUIPMENT SHELTER)
NEW IMPERVIOUS AREA: 0 SQ. FT.

A.D.A. COMPLIANCE: FACILITY IS UNMANNED & NOT FOR HUMAN HABITATION
PARKING REQUIREMENTS ARE UNCHANGED. (NON ASSIGNED TECH PARKING)
TRAFFIC IS UNAFFECTED.

PROJECT TEAM

A&E FIRM: B+T GROUP
2737 78TH AVENUE SE, SUITE 202
MERCER ISLAND, WA 98040
LISA TAYLOR: (501) 317-6851

CUSTOMER/
APPLICANT: AT&T MOBILITY CORPORATION
16221 NE 72ND WAY, RTC 3
P.O. BOX 97061
REDMOND, WA 98052

BUILDING OWNER: CARILLON PROPERTIES
3240 CARILLON POINT
KIRKLAND, WA 98033
(425) 822-1700

CONSULTANT FIRM: MASTEC NETWORK SOLUTIONS
1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800

PROJECT LEAD: SYLVIA RANDAL
(425) 941-5941
srandal@mastec.com

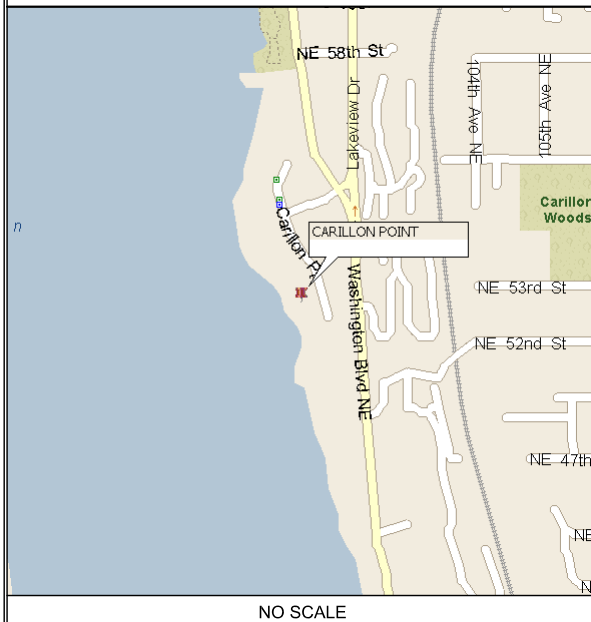
CONSTRUCTION MANAGER: TRASK SIMONET
(425) 999-7306
tsimonet@mastec.com

SITE ACQ.: RACHEL TITUS
(206) 851-9477
rtitus@rykaconsulting.com

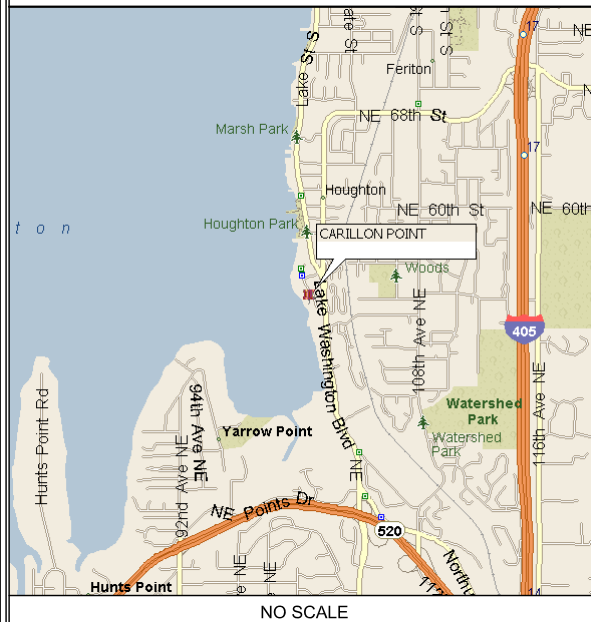
PERMITTING: JESSE LONDON
(206) 523-1941
jlondon@rykaconsulting.com

RF ENGINEER: KEN MOTT
(206) 829-0075
kmott@mastec.com

AREA MAP



LOCATION MAP



DRAWING INDEX

SHEET #	SHEET DESCRIPTION	REV. #
T-1	TITLE SHEET	4
GN-1	GENERAL NOTES	4
GN-2	GENERAL NOTES	4
C-1	OVERALL SITE PLAN	4
C-2	ENLARGED SITE PLAN	4
C-3	EXISTING & PROPOSED BUILDING ELEVATIONS	4
C-4	DETAIL SHEET	4
C-5	DETAIL SHEET	4
G-1	GROUNDING NOTES	4
G-2	GROUNDING PLAN	4
G-3	GROUNDING DETAILS	4
RF-1	EXISTING & PROPOSED ANTENNA PLANS	4

A/E DOCUMENT REVIEW STATUS

CONSULTANT GROUP SIGN OFF		SIGNATURE	DATE
CONSTRUCTION COORDINATOR:			
LANDLORD'S REPRESENTATIVE:			
PROJECT MANAGER			
SITE ACQUISITION:			
AT&T SIGN OFF		SIGNATURE	DATE
RF ENGINEER:			
INTERCONNECT:			
OPERATIONS:			
COMPLIANCE:			
CONSTRUCTION MGR:			
PROJECT MANAGER:			
1		ACCEPTED: WITH OR NO COMMENTS, CONSTRUCTION MAY PROCEED	
2		NOT ACCEPTED: RESOLVE COMMENTS AND RESUBMIT	
ACCEPTANCE DOES NOT CONSTITUTE APPROVAL OF DESIGN, CALCULATIONS, ANALYSIS, TEST METHODS OF MATERIALS DEVELOPED OR SELECTED BY THE SUBCONTRACTOR AND DOES NOT RELIEVE SUBCONTRACTOR FROM FULL COMPLIANCE WITH CONTRACTUAL OBLIGATIONS.			



CALL WASHINGTON ONE CALL
(800) 424-5555
CALL 3 WORKING DAYS
BEFORE YOU DIG!



DRIVING DIRECTIONS

FROM SEA-TAC AIRPORT MERGE ONTO I-405 (NORTH).
TAKE EXIT 14 TO MERGE ONTO WA-520 W TOWARD
SEATTLE. TAKE THE 108TH AVE NE EXIT. TURN RIGHT AT
108TH AVE NE. TAKE THE 1ST LEFT ONTO NORTUP WAY.
TAKE THE 1ST RIGHT ONTO LAKE WASHINGTON BLVD NE.
TURN LEFT AT ACCESS DRIVEWAY. TAKE THE 1ST LEFT
ONTO CARILLON POINT. ARRIVE TO SITE, SITE IS ON
RIGHT HAND SIDE.

LEGAL DESCRIPTION

POR GL 1 & 2 & BLKS F & G OF THE 2ND SUPL
PLAT OF LK WN SH LDS TOW 2ND CL SHLDS ADJ ALL
LY WLY OF W MGN LK WN BLVD-LESS POR N OF S LN
OF N 1076.80 FT SD GL 1 & ITS WLY PROD - LESS
POR THOF S OF LN BEG AT NXN 1902.66 FT S & PLW
N LN GL 1 & W MGN LK WN BLVD TH S 03-09-13 E
ALG W MGN 75 FT TO TPOB OF DESC LN TH N
88-35-53 W TO INNER HARBOR LN & TERMINUS THIS
LN - LESS POR CONV BY REC 8907281497 AKA LOT B
KK ALT LL #LL-91-50 REC 9104302101

PROJECT DESCRIPTION

THE PROPOSED PROJECT INCLUDES:
• REMOVE & REPLACE (4) EXISTING ANTENNAS AT 65'-0".
• REMOVE ALL COAX NOT IN USE.

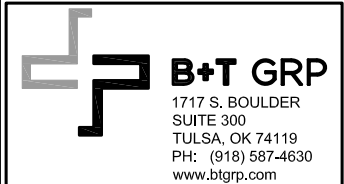
DO NOT SCALE DRAWINGS

ALL DRAWINGS CONTAINED HEREIN
ARE FORMATTED FOR 11X17.
CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING
DIMENSIONS AND CONDITIONS ON THE JOB SITE AND
SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING
OF ANY DISCREPANCIES BEFORE PROCEEDING WITH
THE WORK OR BE RESPONSIBLE FOR SAME.

SEE SHEET GN-1 & GN-2 FOR
ADDITIONAL CONSTRUCTION NOTES



1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800



SB13 CARILLON PT

2000 CARILLON POINT
KIRKLAND, WA 98033

EXISTING
ROOFTOP

PROJECT NO: 90140.001

CHECKED BY: LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

B&T ENGINEERING, INC.



IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

SHEET NUMBER: REVISION:

T-1

4

90140_Carillon_PT-11462.dwg - Sheet:GN-1 - User: mwesel - Apr 22, 2015 - 4:17pm

GENERAL NOTES:

1. THE CONTRACTOR SHALL NOTIFY CLIENT OF ANY ERRORS, OMISSIONS, OR INCONSISTENCIES AS THEY MAY BE DISCOVERED IN PLANS, DOCUMENTS, NOTES, OR SPECIFICATIONS PRIOR TO STARTING CONSTRUCTION INCLUDING, BUT NOT LIMITED BY, DEMOLITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY ERROR, OMISSION, OR INCONSISTENCY AFTER THE START OF CONSTRUCTION WHICH HAS NOT BEEN BROUGHT TO THE ATTENTION OF CLIENT CONSTRUCTION PROJECT MANAGER AND SHALL INCUR ANY EXPENSES TO RECTIFY THE SITUATION. THE MEANS OF CORRECTING ANY ERROR SHALL FIRST BE APPROVED BY CLIENT CONSTRUCTION PROJECT MANAGER.
2. PRIOR TO THE SUBMISSION OF BIDS, CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT. CONTRACTORS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR HAVING BEEN AWARDED THIS PROJECT SHALL VISIT THE CONSTRUCTION SITE WITH THE CONSTRUCTION CONTRACT DOCUMENTS TO VERIFY FIELD CONDITIONS AND CONFIRM THAT THE PROJECT WILL BE ACCOMPLISHED AS SHOWN. PRIOR TO PROCEEDING WITH CONSTRUCTION, ANY ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER VERBALLY AND IN WRITING.
3. FOR COLLOCATION SITES: CONTACT BUILDING OWNER REPRESENTATIVE FOR PARTICIPATION IN BID WALK.
4. DRAWINGS ARE NOT TO BE SCALED, WRITTEN DIMENSIONS TAKE PRECEDENCE, THIS SET OF DOCUMENTS IS INTENDED TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY, UNLESS NOTED OTHERWISE. THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR, AND ANY REQUIREMENTS DEEMED NECESSARY TO COMPLETE PROJECT AS DESCRIBED IN THE DRAWINGS AND OWNER'S PROJECT MANUAL.
5. THE ARCHITECTS/ENGINEERS HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND CONTRACT DOCUMENTS THE COMPLETE SCOPE OF WORK. CONTRACTORS BIDDING THE JOB ARE NEVERTHELESS CAUTIONED THAT MINOR OMISSIONS OR ERRORS IN THE DRAWINGS AND OR SPECIFICATIONS SHALL NOT EXCUSE SAID CONTRACTOR FROM COMPLETING THE PROJECT AND IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THESE DOCUMENTS. THE BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE ARCHITECT/ENGINEER OF ANY CONFLICTS, ERRORS, OR OMISSIONS PRIOR TO SUBMISSION OF CONTRACTOR'S PROPOSAL. IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED OTHERWISE.
6. DRAWINGS ARE NOT TO BE SCALED UNDER ANY CIRCUMSTANCE. CLIENT IS NOT RESPONSIBLE FOR ANY ERRORS RESULTING FROM THIS PRACTICE WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE SHOWN ON PLANS.
7. OWNER, CONTRACTOR, AND CLIENT CONSTRUCTION PROJECT MANAGER SHALL MEET JOINTLY TO VERIFY ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION.
8. THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
9. THE CONTRACTOR SHALL PERFORM WORK DURING OWNER'S PREFERRED HOURS TO AVOID DISTURBING NORMAL BUSINESS.
10. THE CONTRACTOR SHALL PROVIDE CLIENT PROPER INSURANCE CERTIFICATES NAMING CLIENT AS ADDITIONAL INSURED, AND CLIENT PROOF OF LICENSE(S) AND PE & PD INSURANCE.
11. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
12. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
13. ALL WORK PERFORMED ON THE PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK.
14. GENERAL CONTRACTOR SHALL PROVIDE, AT THE PROJECT SITE, A FULL SET OF CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS AND ADDENDA OR CLARIFICATIONS FOR USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT. THIS SET IS A VALID CONTRACT DOCUMENT ONLY IF THE TITLE SHEET IS STAMPED FOR CONSTRUCTION AND EACH SUCCESSIVE SHEET BEARS THE ARCHITECT'S SIGNED WET STAMP.
15. A COPY OF GOVERNING AGENCY APPROVED PLANS SHALL BE KEPT IN A PLACE SPECIFIED BY THE GOVERNING AGENCY, AND BY LAW, SHALL BE AVAILABLE FOR INSPECTION AT ALL TIMES. THE PLANS ARE NOT TO BE USED BY THE WORKMEN, ALL CONSTRUCTION SETS SHALL REFLECT THE SAME INFORMATION AS GOVERNING AGENCY APPROVED PLANS. THE CONTRACTOR SHALL ALSO MAINTAIN ONE SET OF PLANS, IN GOOD CONDITION, COMPLETE WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES UNDER THE DIRECT CARE OF THE SUPERINTENDENT. THE CONTRACTOR SHALL SUPPLY CLIENT CONSTRUCTION PROJECT MANAGER, WITH A COPY OF ALL REVISIONS, ADDENDA, AND/OR CHANGE ORDERS AT THE CONCLUSION OF THE WORK AS A PART OF THE AS-BUILT DRAWING RECORDS.
16. THE STRUCTURAL COMPONENTS OF ADJACENT CONSTRUCTION OR FACILITIES ARE NOT TO BE ALTERED BY THIS CONSTRUCTION PROJECT UNLESS NOTED OTHERWISE.
17. THE CONTRACTOR SHALL STUDY THE STRUCTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING PLANS AND CROSS CHECK THEIR DETAILS, NOTES, DIMENSIONS, AND ALL REQUIREMENTS PRIOR TO THE START OF ANY WORK.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE SECURITY OF THE PROJECT AND SITE WHILE THE WORK IS IN PROGRESS UNTIL THE JOB IS COMPLETE.
19. THE CONTRACTOR HAS THE RESPONSIBILITY OF LOCATING ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THE PLANS, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR, OR SUBCONTRACTOR AS SPECIFIED IN THE AGREEMENT BETWEEN SUBCONTRACTOR AND CONTRACTOR, SHALL BEAR THE EXPENSES OF REPAIR AND/OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGE BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF THE WORK.
20. THE REFERENCES ON THE DRAWINGS ARE FOR CONVENIENCE ONLY AND SHALL NOT LIMIT THE APPLICATION OF ANY DRAWING OR DETAIL.
21. ALL DIMENSIONS ON THE PLANS ARE TO FACE OF STUD (F.O.S.) UNLESS NOTED OTHERWISE (U.N.O.).

22. ALL EXISTING CONSTRUCTION, EQUIPMENT, AND FINISHES NOTED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND WILL BE REMOVED FROM THE SITE WITH THE FOLLOWING EXCEPTIONS:
A. PROPERTY NOTED TO BE RETURNED TO THE OWNER.
B. PROPERTY NOTED TO BE REMOVED BY THE OWNER.
23. THE GOVERNING AGENCIES, CODE AUTHORITIES, AND BUILDING INSPECTORS SHALL PROVIDE THE MINIMUM STANDARDS FOR CONSTRUCTION TECHNIQUES, MATERIALS, AND FINISHES USED THROUGHOUT THE PROJECT. TRADE STANDARDS AND/OR PUBLISHED MANUFACTURERS SPECIFICATIONS MEETING OR EXCEEDING DESIGN REQUIREMENTS SHALL BE USED FOR INSTALLATION.
24. WHEN REQUIRED STORAGE OF MATERIALS OCCURS, THEY SHALL BE EVENLY DISTRIBUTED OVER ROUGH FRAMED FLOORS OR ROOFS SO AS NOT TO EXCEED THE DESIGNED LIVE LOADS FOR THE STRUCTURE. TEMPORARY SHORING AND/OR BRACING IS TO BE PROVIDED WHERE THE STRUCTURE HAS NOT ATTAINED THE DESIGN STRENGTH FOR THE CONDITIONS PRESENT.
25. PRIOR TO THE POURING OF ANY NEW SLAB OVER AN EXISTING SLAB THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL OPENINGS, CHASES, AND EQUIPMENT WHICH ARE TO BE IMPLEMENTED INTO THE NEW WORK. ALL ITEMS DESIGNATED TO BE ABANDONED SHALL BE NOTED AND DISCUSSED WITH THE OWNER AND CLIENT CONSTRUCTION PROJECT MANAGER AS PART OF THE AS-BUILT DRAWING PACKAGE.
26. SEAL ALL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHALL APPROVED MATERIALS IF APPLICABLE TO THIS FACILITY AND OR PROJECT SITE.
27. BUILDING INSPECTORS AND/OR OTHER BUILDING OFFICIALS ARE TO BE NOTIFIED PRIOR TO ANY GRADING, CONSTRUCTION, AND ANY OTHER PROJECT EFFORT AS MANDATED BY THE GOVERNING AGENCY.
28. CONTRACTOR TO PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF PROJECT AREA DURING CONSTRUCTION.
29. THE PROJECT, WHEN COMPLETED, SHALL COMPLY WITH LOCAL SECURITY CODES AND TITLE-24 ENERGY CONSERVATION REQUIREMENTS. (TITLE-24 WHEN APPLICABLE)
30. ALL GLASS AND GLAZING IS TO COMPLY WITH CHAPTER 54 OF THE U.S. CONSUMER SAFETY COMMISSION - SAFETY STANDARDS FOR ARCHITECTURAL GLAZING MATERIALS (42 FR 1428, CFR PART 1201) AND LOCAL SECURITY REQUIREMENTS.
31. CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
32. CONTRACTOR SHALL KEEP GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, AND RUBBISH. CONTRACTOR SHALL REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY OR PREMISES. SITE SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
33. NEW CONSTRUCTION ADDED TO EXISTING CONSTRUCTION SHALL MATCH IN FORM, TEXTURE, FINISH, AND IN MATERIALS EXCEPT AS NOTED IN THE PLANS AND SPECIFICATIONS.
34. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BACKING, BLOCKING, AND/OR SLEEVES REQUIRED FOR THE INSTALLATION OF FIXTURES, MECHANICAL EQUIPMENT, PLUMBING, HARDWARE, AND FINISH ITEMS TO INSURE A PROPER AND COMPLETE JOB.
35. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING A PROJECT LEVEL, STRAIGHT, AND TRUE ACCORDING TO THE PLANS. THE CONTRACTOR SHALL COMPARE THE LINES AND LEVELS OF THE EXISTING CONDITIONS WITH THOSE SHOWN ON THE PLANS PRIOR TO THE START OF ANY CONSTRUCTION. CLIENT SHALL BE NOTIFIED OF ANY ERRORS, OMISSIONS, OR INCONSISTENCIES PRIOR TO ANY CONSTRUCTION.
36. THE CONTRACTOR IS TO PROVIDE PROTECTION FOR ADJOINING PROPERTIES FROM PHYSICAL HARM, NOISE, DUST, DIRT, AND FIRE AS REQUIRED BY THE GOVERNING AGENCIES.
37. WHERE SPECIFIED, MATERIALS TESTING SHALL BE TO THE LATEST STANDARDS AND/OR REVISIONS AVAILABLE AS REQUIRED BY THE GOVERNING AGENCY RESPONSIBLE FOR RECORDING THE RESULTS.
38. THE CONTRACTOR IS RESPONSIBLE FOR THE STORAGE OF ALL MATERIALS AND SHALL NOT DO SO ON PUBLIC PROPERTY WITHOUT A PERMIT TO DO SO FROM THE GOVERNING AGENCIES FOR THIS PURPOSE.
39. GENERAL NOTES AND STANDARD DETAILS ARE THE MINIMUM REQUIREMENTS TO BE USED IN CONDITIONS WHICH ARE NOT SPECIFICALLY SHOWN OTHERWISE.
40. TRADES INVOLVED IN THE PROJECT SHALL BE RESPONSIBLE FOR THEIR OWN CUTTING, FITTING, PATCHING, ETC., SO AS TO BE RECEIVED PROPERLY BY THE WORK OF OTHER TRADES.
41. ALL DEBRIS AND REFUSE IS TO BE REMOVED FROM THE PROJECT PREMISES AND SHALL BE LEFT IN A CLEAN (BROOM FINISH) CONDITION AT ALL TIMES BY EACH TRADE AS THEY PERFORM THEIR OWN PORTION OF THE WORK.
42. CLIENT DOES NOT GUARANTEE ANY PRODUCTS, FIXTURES, AND/OR ANY EQUIPMENT NAMED BY A TRADE OR MANUFACTURER. GUARANTEE OR WARRANTY THAT MAY BE IN EFFECT IS DONE SO THROUGH THE COMPANY OR MANUFACTURER PROVIDING THE PRODUCT, FIXTURE, AND/OR EQUIPMENT ONLY; UNLESS SPECIFIC RESPONSIBILITY IS ALSO PROVIDED BY THE CONTRACTOR/SUBCONTRACTOR IN WRITTEN FORM.
43. CAUTION! CALL BEFORE YOU DIG! BURIED UTILITIES EXIST IN THE AREA AND UTILITY INFORMATION SHOWN MAY NOT BE COMPLETE. CONTACT THE ONE-CALL UTILITY LOCATE SERVICE A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. CALL 811.
44. CONTRACTOR TO REPLACE AND/OR REROUTE ANY EXISTING UNDERGROUND UTILITIES ENCOUNTERED DURING TRENCHING AND GENERAL CONSTRUCTION.
45. CONTRACTOR TO LOCATE ALL UTILITIES PRIOR TO PLACEMENT OF TOWER FOOTING AND OTHER STRUCTURES TO BE PLACED IN GROUND. SEE GENERAL NOTE #6 ON THIS SHEET.
46. SEE CIVIL DRAWINGS FOR ADDITIONAL SITE INFORMATION.
47. CONTRACTOR TO DOCUMENT ALL WORK PERFORMED WITH PHOTOGRAPHS AND SUBMIT TO CLIENT ALONG WITH REDLINED CONSTRUCTION SET.
48. CONTRACTOR TO DOCUMENT ALL CHANGES MADE IN THE FIELD BY MARKING UP (REDLINING) THE APPROVED CONSTRUCTION SET AND SUBMITTING THE REDLINED SET TO CLIENT UPON COMPLETION.

49. GENERAL CONTRACTOR IS TO COORDINATE ALL POWER INSTALLATION WITH POWER COMPANY AS REQUIRED. CONTRACTOR TO REPORT POWER INSTALLATION COORDINATION SOLUTION(S) TO CLIENT REPRESENTATIVE, PROJECT CONSTRUCTION MANAGER AND ARCHITECT.
50. ANY SUBSTITUTIONS OF MATERIALS AND/OR EQUIPMENT, MUST BE APPROVED BY CLIENT CONSTRUCTION MANAGER.
51. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REMEDY ALL FAULTY, INFERIOR, AND/OR IMPROPER MATERIALS, DAMAGED GOODS, AND/OR FAULTY WORKMANSHIP FOR ONE (1) YEAR AFTER THE PROJECT IS COMPLETE AND ACCEPTED UNDER THIS CONTRACT; UNLESS NOTED OTHERWISE IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR. (EXCEPTION) THE ROOFING SUBCONTRACTOR SHALL FURNISH A MAINTENANCE AGREEMENT FOR ALL WORK DONE, COSIGNED BY THE GENERAL CONTRACTOR, TO MAINTAIN THE ROOFING IN A WATERTIGHT CONDITION FOR A PERIOD OF TWO (2) YEARS STARTING AFTER THE DATE OF SUBSTANTIAL COMPLETION OF THE PROJECT, UNLESS OTHERWISE WRITTEN IN THE CONTRACT BETWEEN THE OWNER AND THE CONTRACTOR.
52. THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR THE SAFETY OF THE OWNER'S EMPLOYEES, WORKMEN, AND ALL TIMES DURING THE CONSTRUCTION OF THE PROJECT.
53. THE CONTRACTOR SHALL BE REQUIRED TO PAY FOR ALL NECESSARY PERMITS AND/OR FEES WITH RESPECT TO THE WORK TO COMPLETE THE PROJECT. BUILDING PERMIT APPLICATIONS SHALL BE FILED BY THE OWNER OR HIS REPRESENTATIVE. CONTRACTOR SHALL OBTAIN PERMIT AND MAKE FINAL PAYMENT FOR SAID DOCUMENT.
54. THE ARCHITECT/ENGINEER IN CHARGE SHALL SIGN AND SEAL ALL DRAWINGS AND/OR SPECIFICATIONS.
55. CLIENT WILL REVIEW AND APPROVE SHOP DRAWINGS AND SAMPLES FOR CONFORMANCE WITH DESIGN CONCEPT. CLIENT PROJECT APPROVAL OF A SEPARATE ITEM SHALL NOT INCLUDE APPROVAL OF AN ASSEMBLY IN WHICH THE ITEM FUNCTIONS.
56. ALL ANTENNAS MOUNTED ON ROOF SUPPORT FRAMES TO BE PROVIDED BY CLIENT COMMUNICATIONS.
57. CONTRACTOR TO PROVIDE TRENCH AS REQUIRED TO INSTALL BOTH ELECTRICAL AND TELEPHONE UNDERGROUND CONDUITS (#40 PVC) PER S.C.E. WORKORDER. BACKFILL WITH CLEAN SAND AND COMPACT TO THE SATISFACTION OF THE DISTRICTS INSPECTOR. REPLACE FINISH GRADE WITH MATCHING MATERIALS (GRASS, ASPHALT, CONCRETE, ETC.)
58. CONTRACTOR TO PROVIDE HEAVY STEEL PLATES AT OPEN TRENCHES FOR SAFETY AND TO PROTECT EXISTING GROUND SURFACES FROM HEAVY EQUIPMENT UTILIZED DURING CONSTRUCTION.
59. CONTRACTOR TO PATCH AND REPAIR ALL GROUND SURFACES WITHIN THE CONSTRUCTION AREA AS NECESSARY TO PROVIDE A UNIFORM SURFACE AND MAINTAIN EXISTING SURFACE DRAINAGE SLOPES.
60. CONTRACTOR TO REPLACE LANDSCAPE VEGETATION THAT WAS DAMAGED DUE TO CONSTRUCTION, AND TO MODIFY REMAINING IRRIGATION LINES TO OPERATING CONDITION, PROVIDING FULL COVERAGE TO IMPACTED AREAS.
61. IN THE CASE OF ROOFTOP SOLUTIONS FOR EQUIPMENT AND/OR ANTENNA FRAMES WHERE PENETRATION OF EXISTING ROOFING MATERIALS OCCUR, THE GENERAL CONTRACTOR SHALL COORDINATE WITH BUILDING OWNER AND BUILDING ROOFING CONTRACTOR OF RECORD FOR INSTALLATION, PATCH, REPAIR OR ANY AUGMENTATION TO THE ROOF, AND HAVE THE WORK GUARANTEED UNDER THE ROOFING CONTRACTOR'S WARRANTY FOR MOISTURE PENETRATION OR AND OTHER FUTURE BREACH OF ROOFING INTEGRITY.
62. IN THE CASE OF ROOFTOP SOLUTIONS WITH THE INSTALLATION OF ANTENNAS WITHIN CONCEALED (SHROUDED) SUPPORT FRAMES OR TRIPODS, THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE FRP DESIGNER/FABRICATOR TO ENSURE THAT THE FINAL FRP SHROUD IS SIMULATING (IN APPEARANCE) DESIGNATED EXISTING EXTERIOR BUILDING FACADE MATERIALS, TEXTURES, AND COLORS. THE CONTRACTOR SHALL FURTHERMORE ENSURE THE USE OF COUNTERSUNK FASTENERS IN ALL FRP CONSTRUCTION, WHEN PHOTOSIMULATIONS ARE PROVIDED, THE CONTRACTOR SHALL ENSURE THAT FINAL CONSTRUCTION REPRESENTS WHAT IS INDICATED IN PHOTOSIMULATION. SHOP DRAWINGS SHALL BE PROVIDED TO THE GENERAL CONTRACTOR, CONSTRUCTION COORDINATOR, AND ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION.
63. IN THE CASE OF ROOFTOP SOLUTIONS FOR EQUIPMENT AND/OR ANTENNA FRAMES WHERE ANCHORING TO A CONCRETE ROOF SLAB IS REQUIRED, CONTRACTORS SHALL CONFIRM (PRIOR TO SUBMITTING BID) WITH CONSULTING CONSTRUCTION COORDINATOR AND ARCHITECT THE PRESENCE OF POST TENSION TENDONS WITHIN THE ROOF SLAB - RESULTING FROM AN UNDOCUMENTED DESIGN CHANGE IN THE EXISTING BUILDING "AS-BUILT DRAWING SET" - HAVING INDICATED AN ORIGINAL DESIGN SOLUTION OF REINFORCED CONCRETE W/ EMBEDDED STEEL REBAR. IN THE EVENT POST TENSION SLAB SOLUTION IS PRESENT, CONTRACTOR SHALL INCLUDE PROVISIONS FOR X-RAY PROCEDURES (INCLUDED IN BID) FOR ALL PENETRATION AREAS WHERE ANCHORING OCCURS.
64. GENERAL & SUB CONTRACTORS SHALL USE STAINLESS STEEL METAL LOCKING TIES FOR ALL CABLE TRAY TIE DOWNS AND ALL OTHER GENERAL TIE DOWNS (WHERE APPLICABLE). PLASTIC ZIP TIES SHALL NOT BE PERMITTED FOR USE ON CLIENT PROJECTS. RECOMMENDED MANUFACTURE SHALL BE: PANDUIT CORP. METAL LOCKING TIES MODEL NO. MLT4S-CP UNDER SERIES-304 (OR EQUAL), PANDUIT PRODUCT DISTRIBUTED BY TRIARC.
65. ALL WORK TO BE DONE BETWEEN HOURS OF 8:00 AM AND 5:00 PM, EXCLUDING HOLIDAYS

SPECIAL NOTES:

1. PLANS PART OF THIS SET ARE COMPLEMENTARY. INFORMATION IS NOT LIMITED TO ONE PLAN. DRAWINGS AND SPECIFICATIONS ARE INSTRUMENTS OF SERVICE AND SHALL REMAIN THE PROPERTY OF THE ARCHITECT, WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. THEY ARE NOT TO BE USED BY THE OWNER ON OTHER PROJECTS OR EXTENSION TO THIS PROJECT EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO THE ARCHITECT. THESE PLANS WERE PREPARED TO BE SUBMITTED TO GOVERNMENTAL BUILDING AUTHORITIES FOR REVIEW FOR COMPLIANCE WITH APPLICABLE CODES AND IT IS THE SOLE RESPONSIBILITY OF THE OWNER AND/OR CONTRACTOR TO BUILD ACCORDING TO APPLICABLE BUILDING CODES.
2. IF CONTRACTOR OR SUB-CONTRACTOR FIND IT NECESSARY TO DEVIATE FROM ORIGINAL APPROVED PLANS, THEN IT IS THE CONTRACTOR'S AND THE SUB-CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE ARCHITECT WITH 4 COPIES OF THE PROPOSED CHANGES FOR HIS APPROVAL BEFORE PROCEEDING WITH THE WORK. IN ADDITION THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR PROCURING ALL NECESSARY APPROVALS FROM THE BUILDING AUTHORITIES FOR THE PROPOSED CHANGES BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR AND SUB-CONTRACTORS SHALL BE RESPONSIBLE FOR PROCURING ALL NECESSARY INSPECTIONS AND APPROVALS FROM BUILDING AUTHORITIES DURING THE EXECUTION OF THE WORK.
3. IN EVERY EVENT, THESE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS SHALL BE INTERPRETED TO BE A MINIMUM ACCEPTABLE MEANS OF CONSTRUCTION BUT THIS SHALL NOT RELIEVE THE CONTRACTOR, SUB-CONTRACTOR, AND/OR SUPPLIER/MANUFACTURER FROM PROVIDING A COMPLETE AND CORRECT JOB WHEN ADDITIONAL ITEMS ARE REQUIRED TO THE MINIMUM SPECIFICATION. IF ANY ITEMS NEED TO EXCEED THESE MINIMUM SPECIFICATIONS TO PROVIDE A COMPLETE, ADEQUATE AND SAFE WORKING CONDITION, THEN IT SHALL BE THE DEEMED AND UNDERSTOOD TO BE INCLUDED IN THE DRAWINGS. FOR EXAMPLE, IF AN ITEM AND/OR PIECE OF EQUIPMENT REQUIRES A LARGER WIRE SIZE (I.E. ELECTRICAL WIRE), STRONGER OR LARGER PIPING, INCREASED QUANTITY (I.E. STRUCTURAL ELEMENTS), REDUCED SPACING, AND/OR INCREASED LENGTH (I.E. BOLT LENGTHS, BAR LENGTHS) THEN IT SHALL BE DEEMED AND UNDERSTOOD TO BE INCLUDED IN THE BID/PROPOSAL. THESE DOCUMENTS ARE MEANT AS A GUIDE AND ALL ITEMS REASONABLY INFERRED SHALL BE DEEMED TO BE INCLUDED.
4. THESE CONTRACT DOCUMENTS AND SPECIFICATIONS SHALL NOT BE CONSTRUED TO CREATE A CONTRACTUAL RELATIONSHIP OF ANY KIND BETWEEN THE ARCHITECT AND THE CONTRACTOR.



1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800



1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

SB13
CARILLON
PT

2000 CARILLON POINT
KIRKLAND, WA 98033

EXISTING
ROOFTOP

PROJECT NO: 90140.001
CHECKED BY: LRT

ISSUED FOR:			
REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

B&T ENGINEERING, INC.



IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

SHEET NUMBER: GN-1 | REVISION: 4

90140_Carillon_PT_111462.dwg -- Sheet:GN-2 -- User: mwesel -- Apr 22, 2015 -- 4:17pm

DESIGN CRITERIA:

1. THE STRUCTURAL DESIGN OF THIS PROJECT IS IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE 2012 WITH WASHINGTON STATE BUILDING CODE AMENDMENTS (2012 IBC)
2. DESIGN LOADS:

DESIGN DATA FOR KING COUNTY, WA:

-ROOF SNOW LOAD _____ N/A (NOT A ROOFTOP SOLUTION)

-BASIC WIND SPEED _____ 85 MPH (3 SEC GUST)

-WIND EXPOSURE _____ B

-SEISMIC ZONE _____ D

STRUCTURAL STEEL NOTES:

1. SHOP DRAWINGS FOR STRUCTURAL STEEL SHALL BE SUBMITTED TO THE CONSULTANT FOR REVIEW PRIOR TO FABRICATION.
2. STRUCTURAL STEEL DESIGN, FABRICATION AND ERECTION (INCLUDING FIELD WELDING, HIGH STRENGTH FIELD BOLTING, EXPANSION BOLTS, AND THREADED EXPANSION ANCHORS) SHALL BE BASED ON THE A.I.S.I. "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" LATEST EDITION. SUPERVISION SHALL BE IN ACCORDANCE WITH 2012 IBC CHAPTER 22. BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE CONSULTANT. THE CONSULTANT SHALL BE FURNISHED WITH A COPY OF ALL INSPECTION REPORTS AND TEST RESULTS.
3. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
- TYPE OF MEMBER
- A. WIDE FLANGE SHAPE
B. OTHER SHAPE, PLATES AND ROD
C. PIPE COLUMNS
D. STRUCTURAL TUBING
E. ANCHOR BOLTS
F. CONNECTION BOLTS
- ASTMA-992, Fy 50 KSI
ASTM A36, Fy 36 KSI
ASTM A53, Fy 35 KSI
ASTM A500, Fy 46 KSI
ASTM A307
ASTM A325
4. ALL MATERIAL TO BE HOT DIPPED GALVANIZED AFTER FABRICATION PER A123/A123M-00.
5. ALL WELDING SHALL BE IN CONFORMANCE WITH A.I.S.I. AND AWS STANDARDS AND SHALL BE PERFORMED BY W.A.B.O. CERTIFIED WELDERS USING E70 XX ELECTRODES. ONLY PREQUALIFIED WELDS (AS DEFINED BY AWS) SHALL BE USED. WELDING OF GRADE 60 REINFORCING BARS (IF REQUIRED) SHALL BE PERFORMED USING LOW HYDROGEN ELECTRODES. WELDING OF GRADE 40 REINFORCING BARS (IF REQUIRED) SHALL BE PERFORMED USING E70 XX ELECTRODES. WELDING WITHIN 4" OF COLD BENDS IN REINFORCING STEEL IS NOT PERMITTED. SEE REINFORCING NOTE FOR MATERIAL REQUIREMENTS OF WELDED BARS.
6. COLD-FORMED STEEL FRAMING MEMBERS SHALL BE OF THE SHAPE, SIZE, AND GAGE SHOWN ON THE PLANS. PROVIDE MINIMUM SECTION PROPERTIES INDICATED. ALL COLD-FORMED STEEL FRAMING SHALL CONFORM TO THE A.I.S.I. "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS."
7. BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (3/4" DIA.) AND SHALL HAVE A MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
8. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A307 BOLTS UNLESS NOTED OTHERWISE.
9. ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE DESIGN & CONSTRUCTION SPECIFICATION AND IN ACCORDANCE WITH ASTM A36 UNLESS NOTED OTHERWISE.
10. ALL WELDS TO BE 1/4" FILLET UNLESS NOTED OTHERWISE.
11. TOUCH UP ALL FIELD DRILLING AND WELDING WITH 2 COATS OF GALVACON (ZINC RICH PAINT) OR APPROVED EQUAL.

BUILDING NOTES:

1. PROVIDE SUPPORTS FOR THE ANTENNA COAX CABLES TO THE ELEVATION OF ALL INITIAL AND FUTURE ANTENNAS. ANTENNA COAX CABLES ARE TO BE SUPPORTED AND RESTRAINED AT THE CENTERS SUITABLE TO THE MANUFACTURER'S REQUIREMENTS.

ABBREVIATED ROOF TOP SAFETY PROCEDURES (WHEN APPLICABLE):

(AS PER "ACCIDENT PREVENTION PROGRAM" - BY PERMISSION OF WREN CONSTRUCTION, INC. - 03/01/99)

FALL PROTECTION METHODS AND EQUIPMENT
ROOF TOP INSTALLATIONS


1. FOR WORK IS BEING PERFORMED WITHIN 25' OF AN UNPROTECTED ROOF EDGE, THE CONSTRUCTION SUPERVISOR SHALL DESIGNATE A TRAINED SAFETY MONITOR TO OBSERVE THE MOVEMENTS AND ACTIVITIES OF THE CONSTRUCTION WORKERS.
2. SAFETY MONITOR SHALL WARN CONSTRUCTION WORKERS OF HAZARDS (I.E., BACKING UP TOWARD A ROOF EDGE, ETC.) OR UNSAFE ACTIVITIES. THE SAFETY MONITOR MUST BE ON THE SAME ROOF AND WITHIN VISUAL AND VERBAL DISTANCE OF THE CONSTRUCTION WORKERS.
3. CONSTRUCTION INVOLVING WORKERS TO APPROACH WITHIN 6' OR LESS OF AN UNPROTECTED ROOF EDGE, REQUIRES WORKERS TO USE SAFETY LINE.
4. SAFETY LINE SHALL BE MINIMUM 1/4" DIAMETER NYLON, WITH A NOMINAL TENSILE STRENGTH OF 5400 LBS.
5. SAFETY LINE SHALL BE ATTACHED TO A SUBSTANTIAL MEMBER OF THE STRUCTURE.
6. SAFETY LINE LENGTH SHALL BE SET ALLOWING CONSTRUCTION WORKER TO REACH EDGE OF ROOF, BUT NOT BEYOND.
7. SAFETY BELTS SHALL BE WORN BY ALL CONSTRUCTION WORKERS.
8. MONTHLY SAFETY INSPECTION AND MAINTENANCE OF THE FALL PROTECTION EQUIPMENT SHALL OCCUR BY THE SAFETY COMMITTEE REPRESENTATIVES, INCLUDING:
- INSPECTION OF CONSTRUCTION AREA FOR HAZARDS
USE OF AN INSPECTION CHECKLIST
INTERVIEWING COWORKERS REGARDING SAFETY CONCERNS
REPORTING AND DOCUMENTING ANY HAZARDS
REPORTING HAZARDS TO THE SAFETY COMMITTEE FOR CONSIDERATION
POSTING RESULTS OF INSPECTION AND ANY ACTION TAKEN
RECEIVING AN UNBIASED REVIEW OF ONE'S OWN WORK AREA BY ANOTHER COWORKER SAFETY REPRESENTATIVE

REFER TO ROOFTOP WORK AREA SAFETY PROTOCOL
NATIONAL ASSOCIATION OF TOWER ERECTORS 2000 PUBLICATION

REFERENCED OSHA REGULATION/STANDARDS SHALL BE REVIEWED BY TOWERERECTORS, EQUIPMENT INSTALLERS, AND TOWER/ROOF TOP CONTRACTORS/SUBCONTRACTORS
29 CFR 1926.500 - SCOPE, APPLICATION, AND DEFINITIONS
29 CFR 1926.501 - DUTY TO HAVE FALL PROTECTION
19 CFR 1926.502 - FALL PROTECTION SYSTEMS CRITERIA AND PRACTICES

SYMBOLS AND ABBREVIATIONS

A/C	AIR CONDITIONING	LBS	POUNDS
AGL	ABOVE FINISH GRADE	MAX	MAXIMUM
APPROX	APPROXIMATELY	MECH	MECHANICAL
		MTL	METAL
BLDG	BUILDING	MFR	MANUFACTURE
BLK	BLOCKING	MGR	MANAGER
		MIN	MINIMUM
		MISC	MISCELLANEOUS
CLG	CEILING		
CLR	CLEAR	NA	NOT APPLICABLE
CONC	CONCRETE	NIC	NOT IN CONTRACT
CONST	CONSTRUCTION	NTS	NOT TO SCALE
CONT	CONTINUOUS		
		OC	ON CENTER
DBL	DOUBLE	OD	OUTSIDE DIAMETER
DIA	DIAMETER		
DIAG	DIAGONAL		
DN	DOWN	PPC	POWER PROTECTION CABINET
DET	DETAIL	PROJ	PROJECT
DWG	DRAWING	PROP	PROPERTY
		PT	PRESSURE TREATED
EA	EACH	REQ	REQUIRED
ELEV	ELEVATION	RM	ROOM
ELEC	ELECTRICAL	RO	ROUGH OPENING
EQ	EQUAL		
EQUIP	EQUIPMENT	SHT	SHEET
EXT	EXTERIOR	SIM	SIMILAR
		SPEC	SPECIFICATION
FIN	FINISH	SF	SQUARE FOOT
FLUOR	FLUORESCENT	SS	STAINLESS STEEL
FLR	FLOOR	STL	STEEL
FT	FOOT	STRUCT	STRUCTURAL
		STD	STUD
GA	GAUGE	SUSP	SUSPENDED
GALV	GALVANIZED		
GC	GENERAL CONTRACTOR	TNNG	TINNED
GRND	GROUND	TYP	TYPICAL
GYP BD	GYPSPUM WALL BOARD		
		UNO	UNLESS NOTED OTHERWISE
HORZ	HORIZONTAL		
HR	HOOR		
HT	HEIGHT	VERT	VERTICAL
HVAC	HEATING VENTILATION AIR CONDITIONING	VIF	VERIFY IN FIELD
		W/	WITH
		W/O	WITHOUT
		WP	WATER PROOF
ID	INSIDE DIAMETER		
IN	INCH		
INFO	INFORMATION		
INSUL	INSULATION		
INT	INTERIOR		
IBC	INTERNATIONAL BUILDING CODE		

— UGT —	— UGT —	UNDERGROUND TELCO
— UGP —	— UGP —	UNDERGROUND POWER
— — —	— — —	GROUND WIRE
— — —	— — —	COAXIAL CABLE
		ANTENNA
CL		CENTERLINE
(E)		EXISTING
(P)		PROPOSED
X X-3		DETAIL NUMBER
		SHEET NUMBER

SPECIAL INSPECTIONS:

SPECIAL INSPECTIONS IN ACCORDANCE WITH IBC 2006 SECTION 1704.

SOILS/GEOTECHNICAL:

- ☐ SHORING INSTALLATION AND MONITORING
- ☐ OBSERVE AND MONITOR EXCAVATION
- ☐ VERIFY SOIL BEARING _____ psf BEARING
- ☐ SUBSURFACE DRAINAGE PLACEMENT
- ☐ VERIFY FILL MATERIAL AND COMP ACTION
- ☐ VERIFY CONDITIONS AS ANTICIPATED
- ☐ PILE PLACEMENT (AUGER CAST/DRIVEN PILE)
- ☐ OTHER _____

REINFORCED CONCRETE:

- ☐ REINFORCING STEEL AND CONCRETE PLACEMENT
- ☐ PRESTRESSED/PRECAST CONCRETE FABRICATION AND ERECTION
- ☐ BATCH PLANT INSPECTION
- ☐ SHOTCRETE
- ☐ GROUTING
- ☐ OTHER _____

STRUCTURAL STEEL:

- ☐ FABRICATION AND SHOP WELDS
- ☐ ERECTION AND FIELD WELDS AND BOLTING
- ☐ OTHER _____

STRUCTURAL ALUMINUM:

- ☐ FABRICATION AND SHOP WELDS
- ☐ ERECTION AND FIELD WELDS AND BOLTING
- ☐ OTHER _____

STRUCTURAL MASONRY:

- ☐ CONTINUOUS
- ☐ PERIODIC
- ☐ _____

OTHER: _____

ANCHORING TO CONCRETE:

- ☐ BOLTS INSTALLED IN CONCRETE
- ☐ POST-INSTALLATION ADHESIVE ANCHORS
- ☐ POST-INSTALLATION MECHANICAL ANCHORS



MasTec
Network Solutions

1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800



SB13
CARILLON
PT

2000 CARILLON POINT
KIRKLAND, WA 98033

EXISTING
ROOFTOP

PROJECT NO: 90140.001

CHECKED BY: LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

B&T ENGINEERING, INC.



IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

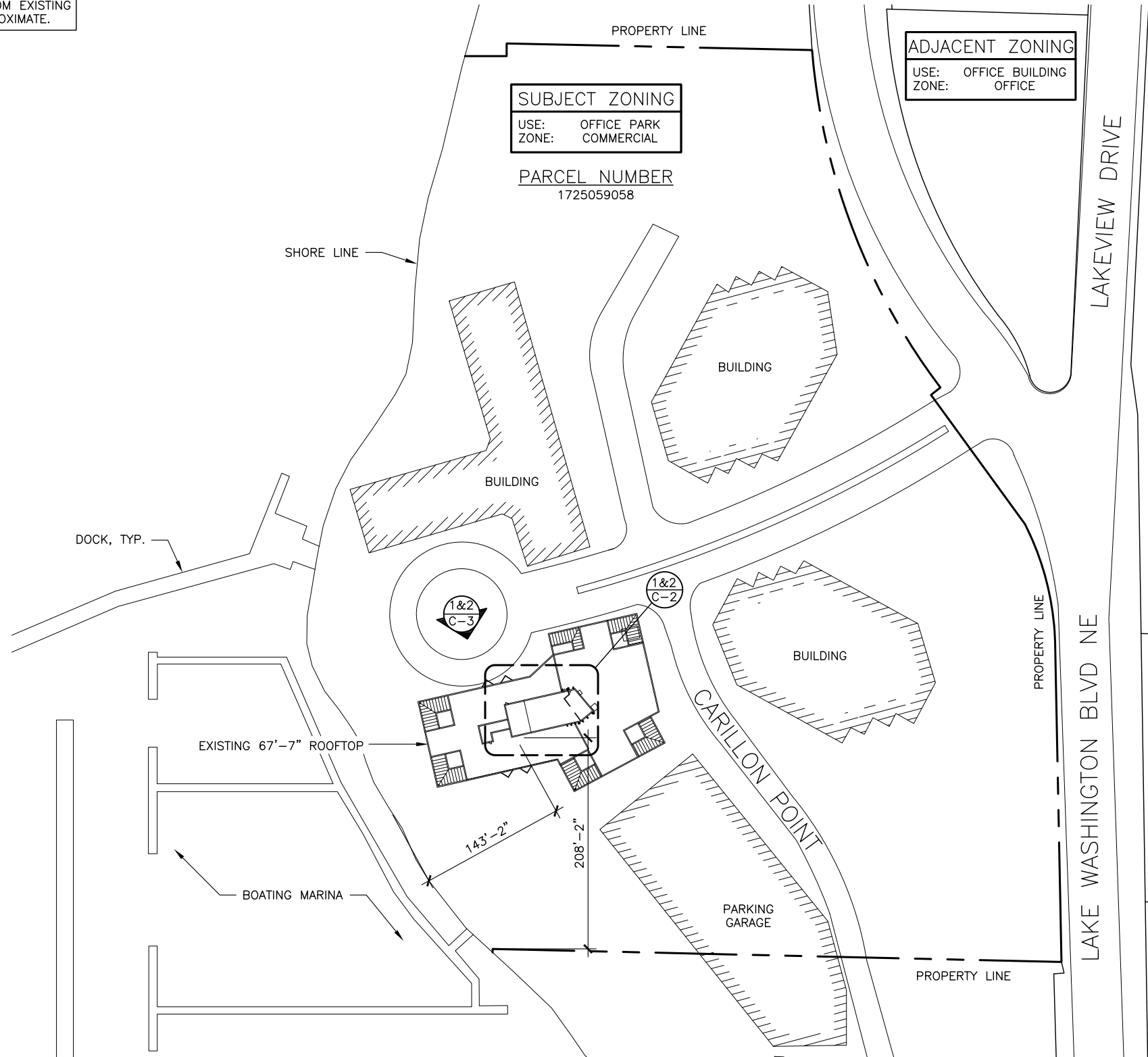
SHEET NUMBER:

GN-2

REVISION:

4

THIS IS NOT A SURVEY
ALL INFORMATION AND TRUE NORTH
HAVE BEEN OBTAINED FROM EXISTING
DRAWINGS AND ARE APPROXIMATE.



POR GL 1 & 2 & BLKS F & G OF THE
2ND SUPL PLAT OF LK WN SH LDS TGW
2ND CL SHLDS ADJ ALL LY WLY OF W
MGN LK WN BLVD-LESS POR N OF S LN
OF N 1076.80 FT SD GL 1 & ITS WLY
PROD - LESS POR THOF S OF LN BEG AT
NXN 1902.66 FT S & PLW N LN GL 1 &
W MGN LK WN BLVD TH S 03-09-13 E
ALG W MGN 75 FT TO TPOB OF DESC LN
TH N 88-35-53 W TO INNER HARBOR LN
& TERMINUS THIS LN - LESS POR CONV
BY REC 8907281497 AKA LOT B KK ALT
LL #LL-91-50 REC 9104302101

1 OVERALL SITE PLAN
SCALE: 11x17: 1/128" = 1'-0" 24x36: 1/64" = 1'-0"



1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800



1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

SB13 CARILLON PT

2000 CARILLON POINT
KIRKLAND, WA 98033

EXISTING
ROOFTOP

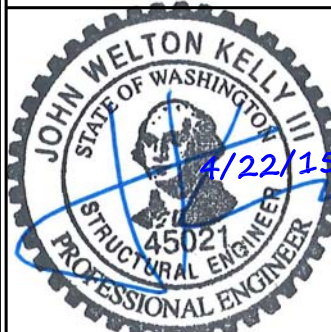
PROJECT NO: 90140.001

CHECKED BY: LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

B&T ENGINEERING, INC.



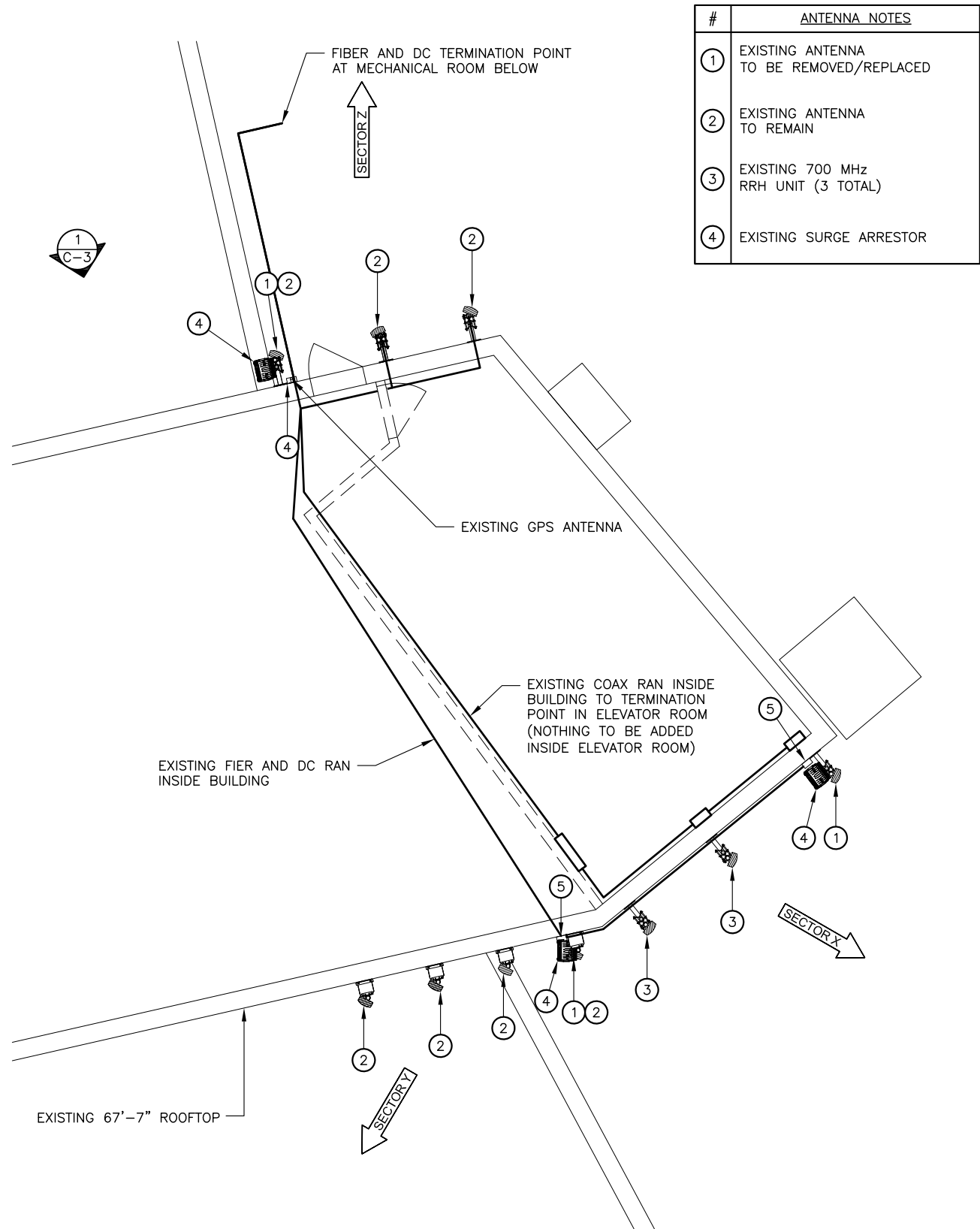
IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

SHEET NUMBER: REVISION:

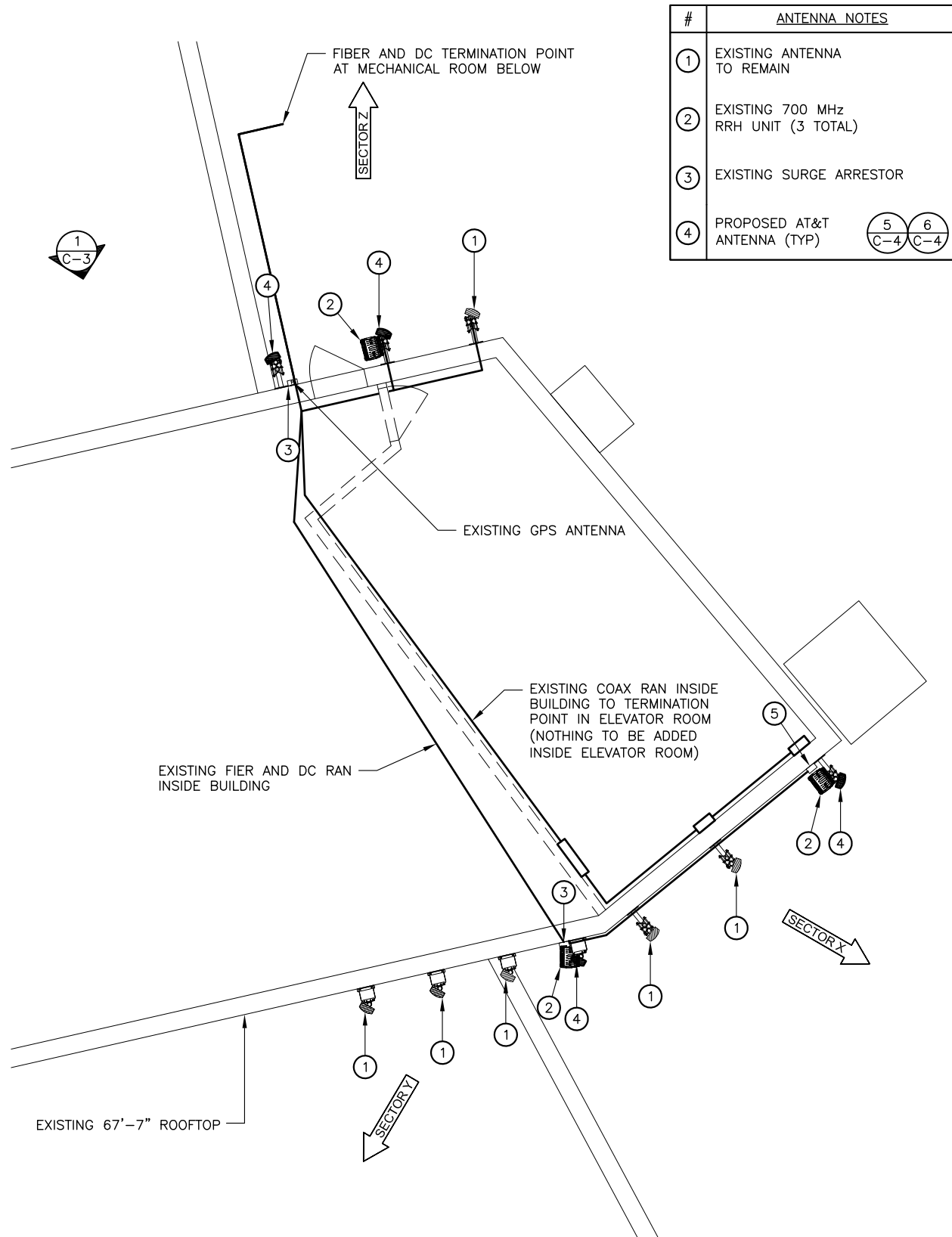
C-1

4

90140_Carillon_PT_11462.dwg - SheetC-2 - User: mweisel - Apr 22, 2015 - 4:18pm



1 EXISTING ENLARGED SITE PLAN
SCALE: 11x17: 1/8" = 1'-0" 24x36: 1/4" = 1'-0"



2 PROPOSED ENLARGED SITE PLAN
SCALE: 11x17: 1/8" = 1'-0" 24x36: 1/4" = 1'-0"



MasTec
Network Solutions

1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

SB13
**CARILLON
PT**

2000 CARILLON POINT
KIRKLAND, WA 98033

EXISTING
ROOFTOP

PROJECT NO: 90140.001

CHECKED BY: LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

B&T ENGINEERING, INC.



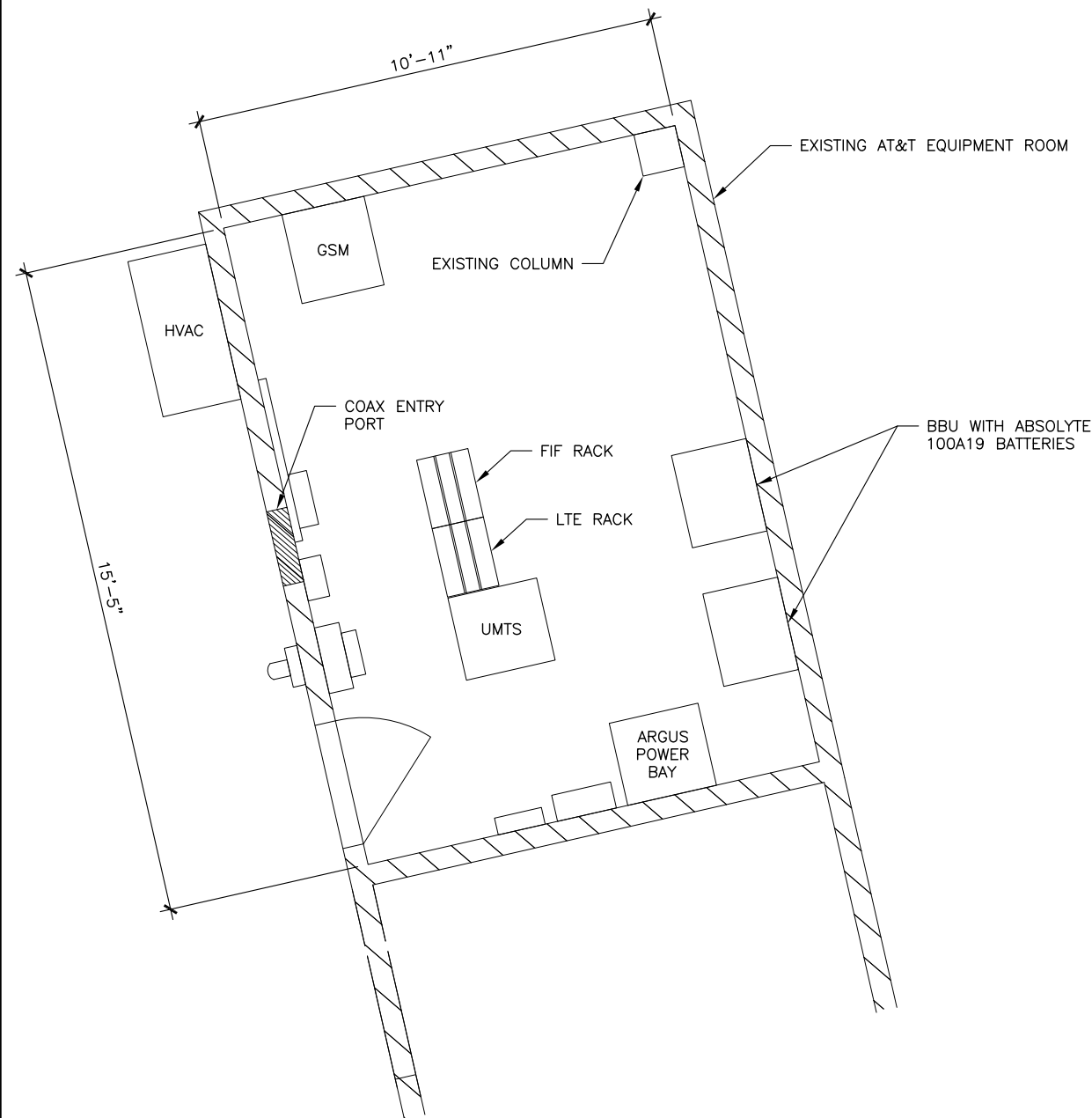
IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

SHEET NUMBER: REVISION:

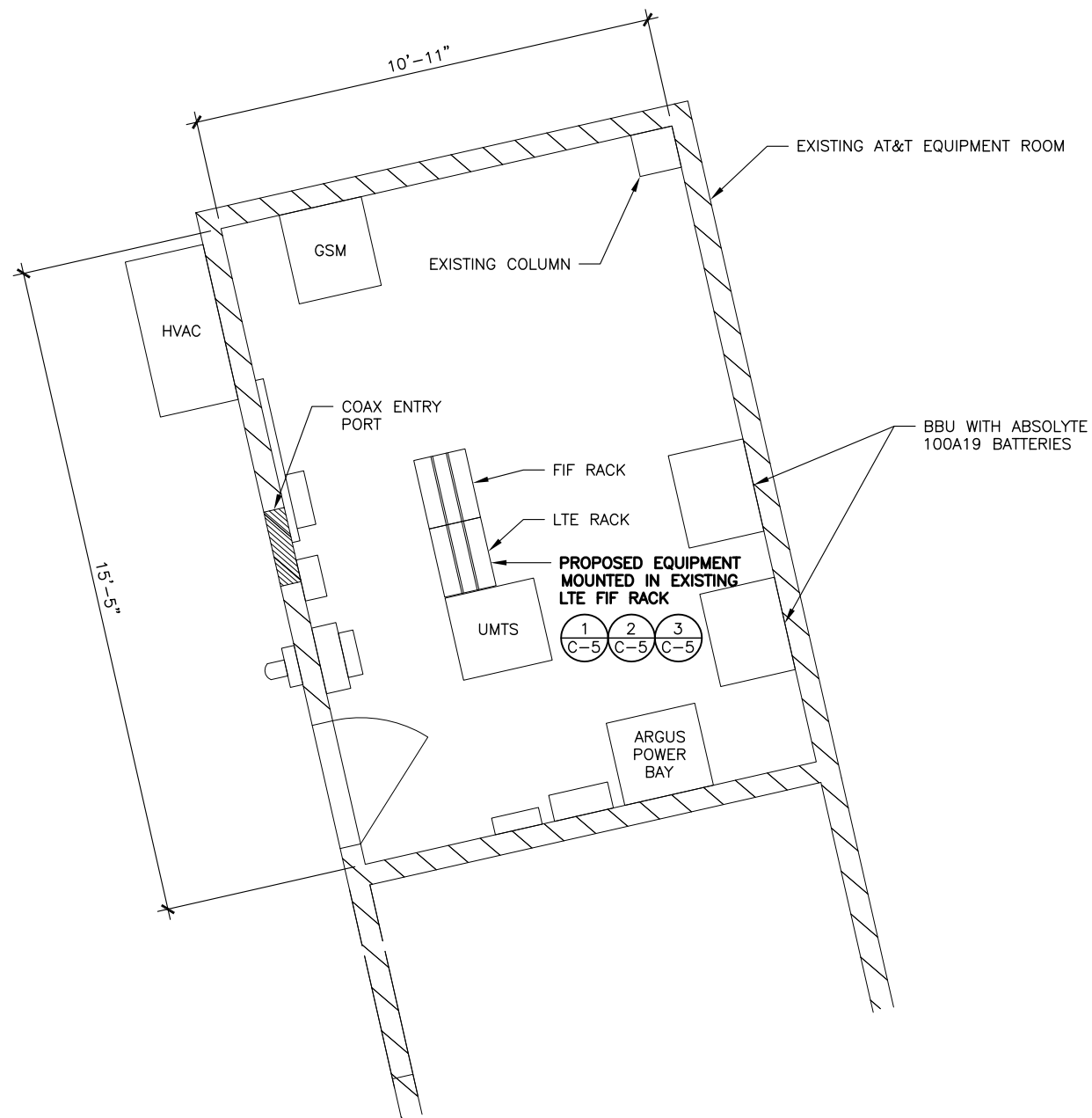
C-2

4

90140_Carillon_PT_111462.dwg - SheetC-2.1 - User: mwesel - Apr 22, 2015 - 4:18pm



1 EXISTING EQUIPMENT ROOM PLAN
SCALE: 11x17: 1/4" = 1'-0" 24x36: 1/2" = 1'-0"



2 PROPOSED EQUIPMENT ROOM PLAN
SCALE: 11x17: 1/4" = 1'-0" 24x36: 1/2" = 1'-0"



MasTec
Network Solutions

1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

SB13
**CARILLON
PT**

2000 CARILLON POINT
KIRKLAND, WA 98033

EXISTING
ROOFTOP

PROJECT NO: 90140.001

CHECKED BY: LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

B&T ENGINEERING, INC.



IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

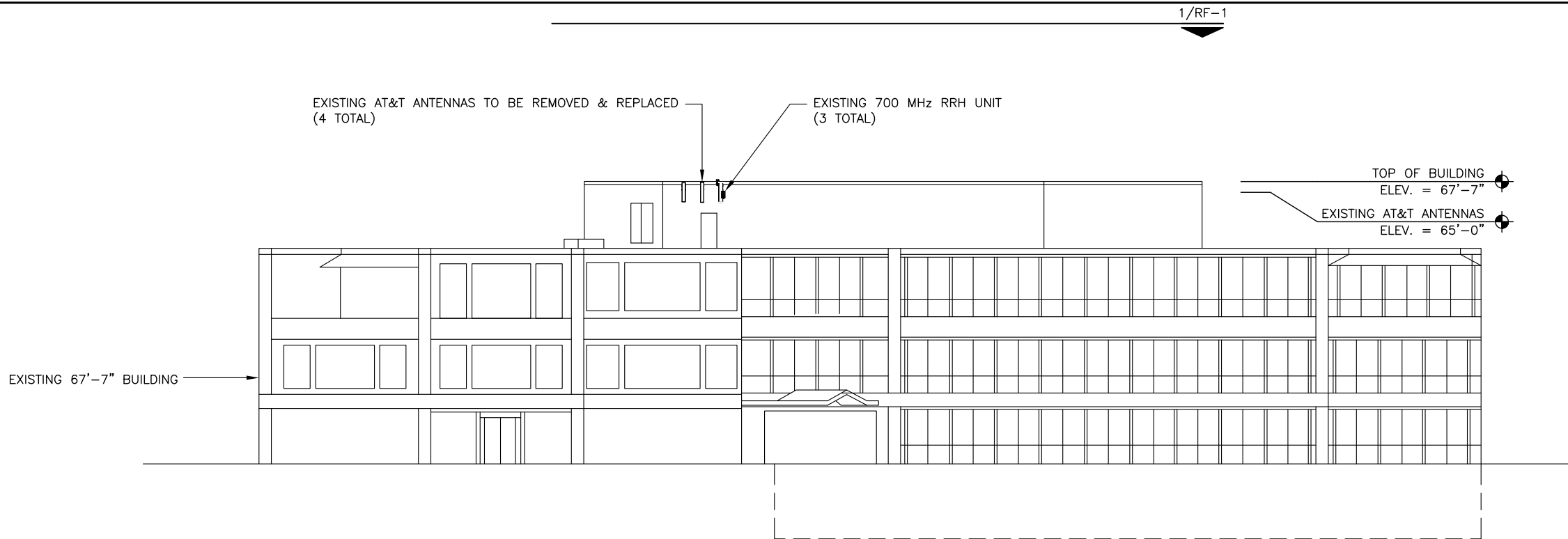
SHEET NUMBER:

C-2.1

REVISION:

4

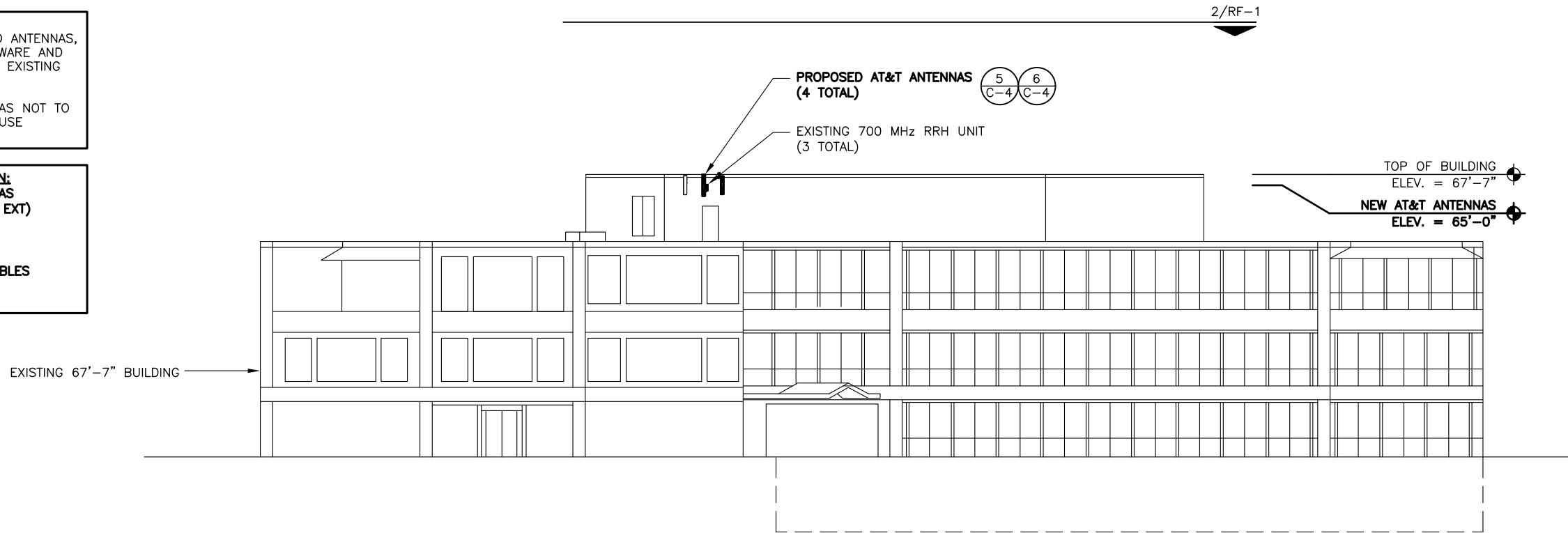
90140_Carillon_PT_111462.dwg - SheetC-3 - User: mwsel - Apr 22, 2015 - 4:18pm



1 EXISTING BUILDING NORTHWEST ELEVATION
SCALE: 11x17: 1/2" = 1'-0" 24x36: 1" = 1'-0"

- NOTES:
1. PAINT PROPOSED ANTENNAS, MOUNTING HARDWARE AND COAX TO MATCH EXISTING CONDITIONS.
 2. TOP OF ANTENNAS NOT TO EXCEED PENTHOUSE ROOFLINE.

FINAL CONFIGURATION:
(10) PANEL ANTENNAS
(6) RRHS (3 INT/3 EXT)
(12) TMAS
(1) FC-12
(3) DC-2
(12) 7/8" COAX CABLES
(3) FIBER LINES
(6) DC CABLES



2 PROPOSED BUILDING NORTHWEST ELEVATION
SCALE: 11x17: 1/16" = 1'-0" 24x36: 1/8" = 1'-0"



MasTec
Network Solutions

1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

SB13
**CARILLON
PT**

2000 CARILLON POINT
KIRKLAND, WA 98033

EXISTING
ROOFTOP

PROJECT NO: 90140.001

CHECKED BY: LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

B&T ENGINEERING, INC.



IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

SHEET NUMBER:

C-3

REVISION:

4

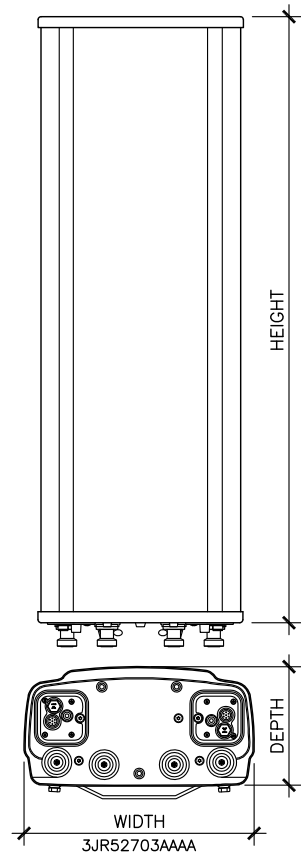
90140_Carillon_PT_111462.dwg - SheetC-4 - User: mwsel - Apr 22, 2015 - 4:18pm

1 NOT USED
SCALE: N.T.S.

2 NOT USED
SCALE: N.T.S.

3 RRH MOUNTING PIPE CLAMP
SCALE: N.T.S.

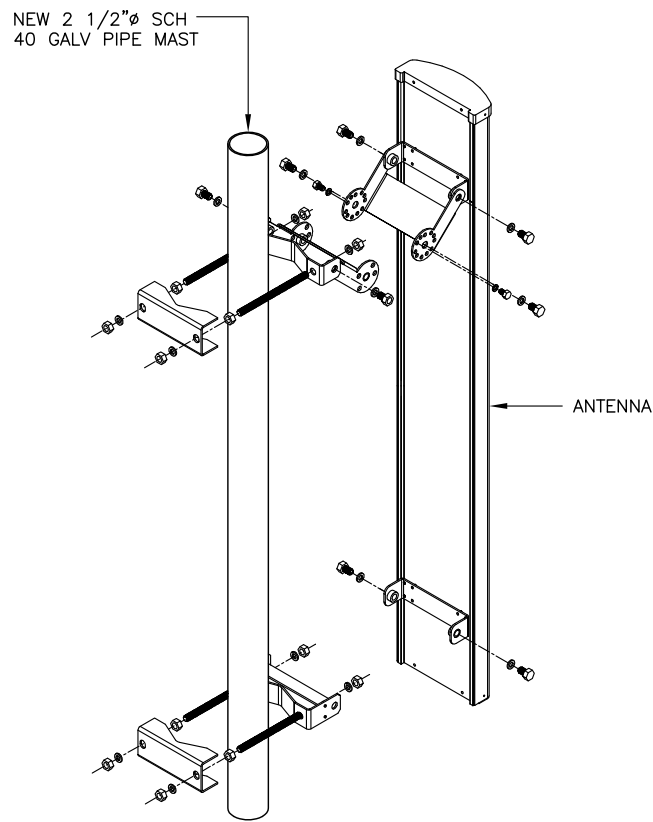
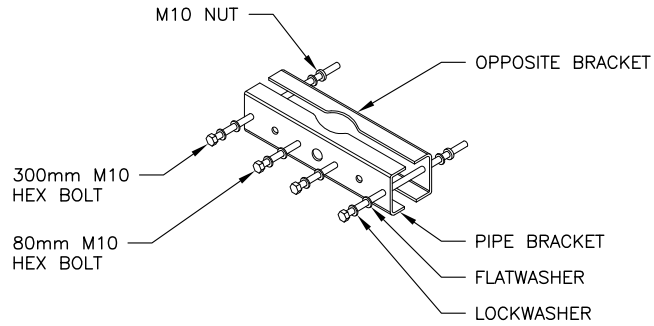
4 NOT USED
SCALE: N.T.S.



ANTENNA DIMENSIONS (INCHES)				
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
742-264	51.8"	10.3"	5.5"	36.4 lbs
3JR52703AAAA	96"	13.4"	16.5"	163.8 lbs

- NOTES:
1. VERIFY ANTENNA DIMENSIONS WITH MANUFACTURER.
 2. ANTENNA MOUNTING KIT FOR 2 TO 4.5 O.D. MAST (MODEL #DM380) (QTY. 2)
 3. LOCKING TILT MOUNT KIT 0-13 DEGREES DOWNTILT ANGLE (MODEL #DB5083)
 4. VERIFY FINAL ANTENNA MODEL WITH CURRENT VERSION OF THE AT&T RFDS.

5 PANEL ANTENNA DETAIL
SCALE: N.T.S.



6 ANTENNA MOUNTING DETAIL
SCALE: N.T.S.



MasTec
Network Solutions

1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

SB13
**CARILLON
PT**

2000 CARILLON POINT
KIRKLAND, WA 98033

EXISTING
ROOFTOP

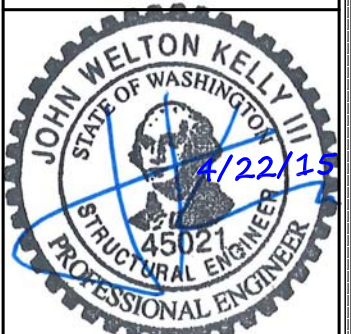
PROJECT NO: 90140.001

CHECKED BY: LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

B&T ENGINEERING, INC.



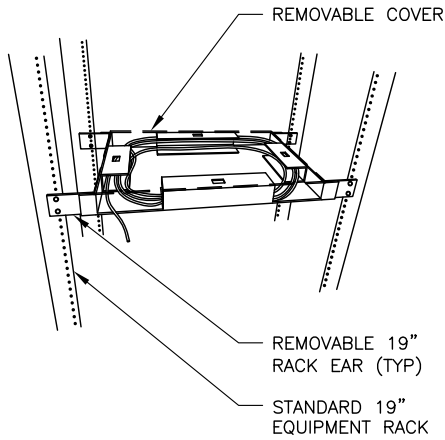
IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

SHEET NUMBER:

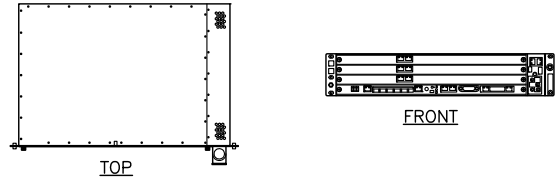
C-4

REVISION:

4

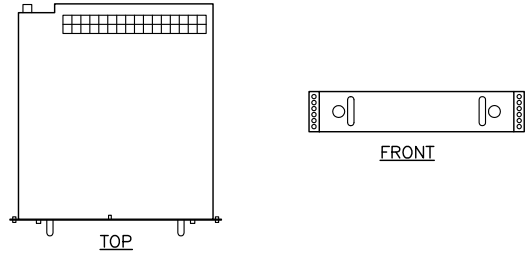


1 EXCESS CABLE TRAY
SCALE: N.T.S.



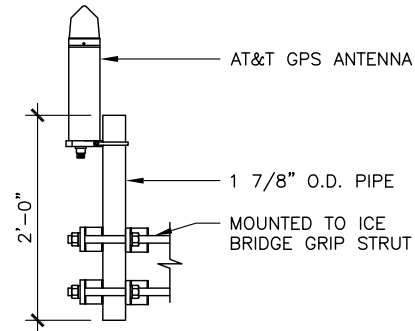
BBU	
MANUFACTURER	ALCATEL LUCENT
MODEL	99926 BBU
HEIGHT	3.469"; 2U (RACK UNITS)
DEPTH	11.81"
WIDTH	19"
WEIGHT	26 LBS

2 BBU DETAIL
SCALE: N.T.S.



SURGE SUPPRESSOR	
MANUFACTURER	ALCATEL LUCENT
MODEL	DC6-48-60-RM
HEIGHT	3.469"; 2U (RACK UNITS)
DEPTH	20.1"
WIDTH	16.8"
WEIGHT	26 LBS

3 RAYCAP SURGE SUPPRESSOR
SCALE: N.T.S.



1. LOCATION OF ANTENNA MUST HAVE CLEAR VIEW OF SOUTHERN SKY AND CONNOT HAVE ANY BLOCKAGES EXCEEDING 25% OF THE SURFACE AREA OF A HEMISPHERE AROUND THE GPS ANTENNA.
2. ALL GPS ANTENNA LOCATIONS MUST BE ABLE TO RECEIVE CLEAR SIGNALS FROM A MINIMUM OF FOUR (4) SATELLITES. VERIFY WITH HANDHELD GPS BEFORE FINAL LOCATION OF GPS ANTENNA.
3. ADD LUCENT, 408762045, KS24535L10, 1:2 GPS SPLITTER, ASSEMBLY
4. THE GPS IS TO HAVE A MINIMUM 10'-0" SEPARATION FROM ANY TRANSMITTING ANTENNA.

4 LTE GPS ANTENNA
SCALE: N.T.S.



1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800



1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

SB13
**CARILLON
PT**

2000 CARILLON POINT
KIRKLAND, WA 98033

EXISTING
ROOFTOP

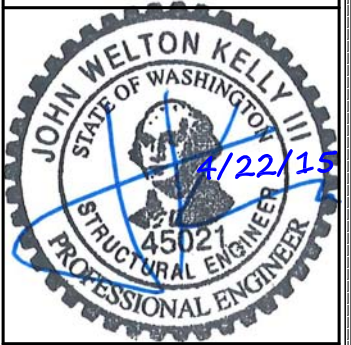
PROJECT NO: 90140.001

CHECKED BY: LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

B&T ENGINEERING, INC.



IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

SHEET NUMBER:

C-5

REVISION:

4

90140_Carillon_PT_111462.dwg -- SheetG-1 -- User: mwesel -- Apr 22, 2015 -- 4:18pm

A. GENERAL

1. EXAMINE THE SITE CONDITIONS VERY CAREFULLY AND THE SCOPE OF PROPOSED WORK TOGETHER WITH THE WORK OF ALL OTHER TRADES AND INCLUDE IN THE BID PRICE ALL COSTS FOR WORK SUCH AS EQUIPMENT AND WIRING MADE NECESSARY TO ACCOMMODATE THE ELECTRICAL SYSTEMS SHOWN AND SYSTEMS OF OTHER TRADES.
2. SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.
3. PERFORM DETAILED VERIFICATION OF WORK PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND COMMENCING CONSTRUCTION. ISSUE A WRITTEN NOTICE TO THE CONSULTANT OF ANY DISCREPANCIES.
4. OBTAIN ALL PERMITS, PAY ASSOCIATED FEES AND SCHEDULE INSPECTION.
5. PROVIDE ALL LABOR, MATERIAL, EQUIPMENT, INSURANCE, AND SERVICES TO COMPLETE THIS PROJECT IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND PRESENT IT AS FULLY OPERATIONAL TO THE SATISFACTION OF THE OWNER.
6. CARRY OUT WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND O.S.H.A.
7. PRIOR TO BEGINNING WORK COORDINATE ALL POWER AND TELCO WORK WITH THE LOCAL UTILITY COMPANY AS IT MAY APPLY TO THIS SITE. ALL WORK TO COMPLY WITH THE RULES AND REGULATIONS OF THE UTILITIES INVOLVED.
8. FABRICATION AND INSTALLATION OF THE COMPLETE ELECTRICAL SYSTEM SHALL BE DONE IN A FIRST CLASS WORKMANSHIP PER NECA STANDARD 1-2000 BY QUALIFIED PERSONNEL EXPERIENCED IN SUCH WORK AND SHALL SCHEDULE THE WORK IN AN ORDERLY MANNER SO AS NOT TO IMPEDE PROGRESS OF THE PROJECT.
9. DURING PROGRESS OF THE WORK, MAINTAIN AN ACCURATE RECORD OF THE INSTALLATION OF THE ELECTRICAL SYSTEMS, LOCATING EACH CIRCUIT PRECISELY AND DIMENSIONING EQUIPMENT, CONDUIT AND CABLE LOCATIONS. UPON COMPLETION OF THE INSTALLATION, TRANSFER ALL RECORD DATA TO BLACK LINE PRINTS OF THE ORIGINAL DRAWINGS AND SUBMIT THESE DRAWINGS AS RECORD DRAWINGS TO THE CONSULTANT.
10. COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL, OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
11. GENERAL CONTRACTOR IS RESPONSIBLE FOR REQUESTING CONNECTION OF COMMERCIAL POWER FROM THE POWER COMPANY. ELECTRICAL CONTRACTOR SHALL COORDINATE THIS WORK WITH THE GENERAL CONTRACTOR.
12. COORDINATE EXACT TELEPHONE REQUIREMENTS AND SERVICE ROUTING WITH LOCAL TELEPHONE COMPANY. APPLY FOR TELEPHONE SERVICE IMMEDIATELY UPON AWARD OF CONTRACT.

B. BASIC MATERIALS AND METHODS

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE EDITION OF THE NEC ACCEPTED BY THE LOCAL JURISDICTION AND TO THE APPLICABLE LOCAL CODES AND REGULATIONS.
2. ALL MATERIALS AND EQUIPMENT SHALL BE NEW. MATERIALS AND EQUIPMENT SHALL BE THE STANDARD PRODUCTS OF MANUFACTURER’S CURRENT DESIGN. ANY FIRST-CLASS PRODUCT MADE BY A REPUTABLE MANUFACTURER MAY BE USED PROVIDING IT CONFORMS TO THE CONTRACT REQUIREMENTS AND MEETS THE APPROVAL OF THE CONSULTANT AND THE OWNER.
3. ARRANGE CONDUIT, WIRING, EQUIPMENT, AND OTHER WORK GENERALLY AS SHOWN, PROVIDING PROPER CLEARANCES AND ACCESS. CAREFULLY EXAMINE ALL CONTRACT DRAWINGS AND FIT THE WORK IN EACH LOCATION WITHOUT SUBSTANTIAL ALTERATION. WHERE DEPARTURES ARE PROPOSED BECAUSE OF FIELD CONDITIONS OR OTHER CAUSES, PREPARE AND SUBMIT DETAILED DRAWINGS FOR ACCEPTANCE.
4. THE CONTRACT DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ALL OFFSETS, BENDS, FITTINGS AND ACCESSORIES ARE NOT NECESSARILY SHOWN. PROVIDE ALL SUCH ITEMS AS MAY BE REQUIRED TO FIT THE WORK TO THE CONDITIONS.
5. MAINTAIN ALL CLEARANCES AS REQUIRED BY NEC.
6. SEAL AROUND CONDUITS AND AROUND CONDUCTORS WITHIN CONDUITS ENTERING THE MODULAR CABINETS WHERE PENETRATION OCCURS WITH A SILICONE SEALANT TO PREVENT MOISTURE PENETRATION INTO BUILDING.
7. SILICONE SEAL AROUND ALL BOLTS AND SCREWS USED TO SECURE EQUIPMENT TO EXTERIOR OF BUILDING.
8. MAKE NECESSARY CONNECTIONS FOR BATTERY IN EMERGENCY LIGHT FIXTURE. CONNECT EXTERIOR LIGHT FIXTURE (PROVIDED BY SHELTER MANUFACTURER) TO EXTERNAL JUNCTION BOX.

C. CONDUCTORS AND CONNECTORS

1. UNLESS NOTED OTHERWISE, ALL CONDUCTORS SHALL BE COPPER, MINIMUM SIZE #12 AWG, WITH THERMOPLASTIC INSULATION CONFORMING TO NEMA WC5 OR CROSS-LINKED POLYETHYLENE INSULATION CONFORMING TO NEMA WC7. (TYPES THHN OR THWN). INSULATION SHALL BE RATED FOR 90 CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH NEC.
2. ALL CONDUCTORS USED FOR GROUNDING SHALL BE COPPER AND SHALL HAVE GREEN INSULATION.
3. FOR COPPER CONDUCTORS #6 AWG AND SMALLER USE 3M SCOTCH-LOK OR T&B STA-KON COMPRESSION TYPE CONNECTORS WITH INTEGRAL OR SEPARATE INSULATION CAPS. FOR COPPER CONDUCTORS LARGER THAN #6 AWG USE SOLDERLESS, IDENT HEX SCREW OR BOLT TYPE PRESSURE CONNECTORS OR DOUBLE COMPRESSION C-CLAMP CONNECTORS, UNLESS SPECIFIED OTHERWISE ON DRAWINGS.
4. UNLESS NOTED OTHERWISE ALL LUGS SHALL BE TIN PLATED COPPER, TWO-HOLE, LONG BARREL, COMPRESSION TYPE.
5. CONDUCTOR LENGTHS SHALL BE CONTINUOUS FROM TERMINATION TO TERMINATION WITHOUT SPLICES. SPLICES ARE NOT ACCEPTABLE. IF SPLICES ARE UNAVOIDABLE PRIOR APPROVAL FROM THE ENGINEER MUST BE OBTAINED.

D. RACEWAYS AND BOXES

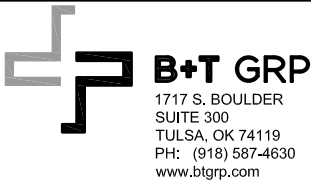
1. ALL CONDUIT SHALL BE UL LABELED.
2. ALL EMPTY CONDUITS INSTALLED FOR FUTURE USE SHALL HAVE A PULL CORD.
3. SHEET METAL BOXES SHALL CONFORM TO NEMA OS1; CAST-METAL BOXES SHALL CONFORM TO NEMA 81 AND SHALL BE SIZED IN ACCORDANCE WITH NEC UNLESS NOTED OTHERWISE.

E. GROUNDING

1. ALL SAFETY GROUNDING OF THE ELECTRICAL EQUIPMENT SHALL BE CARRIED OUT IN ACCORDANCE WITH THE CURRENT REVISION NEC.
2. GROUND LUGS ARE SPECIFIED UNDER SECTION 3 "CONDUCTORS AND CONNECTORS".
3. ALL GROUND LUG AND COMPRESSION CONNECTIONS SHALL BE COATED WITH ANTI-OXIDANT AGENT, SUCH AS NO-OX, NOALOX, PENETROX OR KOPRSHIELD.
4. GROUND ALL EXPOSED METALLIC OBJECTS ON BUILDING EXTERIOR INCLUDING BUILDING TIE DOWN BRACKETS.
5. PROVIDE LOCK WASHERS FOR ALL MECHANICAL CONNECTIONS FOR GROUND CONDUCTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT.
6. DO NOT INSTALL GROUND RING OUTSIDE OF PROPERTY LINE.
7. REMOVE ALL PAINT AND CLEAN ALL DIRT FROM SURFACES REQUIRING GROUND CONNECTIONS, REPAINT TO MATCH AFTER CONNECTION IS MADE TO MAINTAIN CORROSION RESISTANCE.
8. ALL EXTERIOR GROUNDING CONDUCTORS INCLUDING EXTERIOR GROUND RING SHALL BE #2 AWG SOLID BARE TINNED COPPER. MAKE ALL GROUND CONNECTIONS AS SHORT AND DIRECT AS POSSIBLE. AVOID SHARP BENDS. THE RADIUS OF ANY BEND SHALL NOT BE LESS THAN 8" AND THE ANGLE OF ANY BEND SHALL NOT EXCEED 90°. GROUNDING CONDUCTORS SHALL BE ROUTED DOWNWARD TOWARD THE BURIED GROUND RING.
9. REPAIR ALL GALVANIZED SURFACES THAT HAVE BEEN DAMAGED BY THERMO-WELDING WITH ERICO T-319 GALVANIZING BAR.
10. ALL GROUND CONNECTIONS SHALL BE APPROVED FOR THE METALS BEING CONNECTED.
11. ALL EXTERNAL GROUND CONNECTIONS SHALL BE EXOTHERMICALLY WELDED. ALL EXOTHERMIC WELDS TO EXTERIOR GROUND RING SHALL BE THE PARALLEL TYPE, EXCEPT FOR THE GROUND RODS WHICH ARE TEE EXOTHERMIC WELDS. REPAIR ALL GALVANIZED SURFACES THAT HAVE BEEN DAMAGED BY EXOTHERMIC WELDING. USE SPRAY GALVANIZER SUCH AS HOLUB LECTROSOL #15-501.
12. CONTRACTOR SHALL NOTIFY AT&T WHEN THE BURIED GROUND RING IS INSTALLED SO THE REPRESENTATIVE CAN INSPECT THE GROUND RING BEFORE IT IS BACKFILLED WITH SOIL. CONTACT: AT&T PROJECT MGR.
13. FOR METAL FENCE POST GROUNDING, USE A HEAVY DUTY TYPE GROUNDING CLAMP OR EXOTHERMIC WELD CONNECTION TO POST.
14. WHERE MECHANICAL CONNECTORS (TWO-HOLE OR CLAMP) ARE USED, APPLY A LIBERAL PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NO OXIDE A" BY DEARBORN CHEMICAL COMPANY ON ALL CONNECTORS.
15. BOND ALL EXTERIOR CONDUITS, PIPES AND CYLINDRICAL METALLIC OBJECTS WITH A PENN-UNION GT SERIES CLAMP, BLACKBURN GUV SERIES CLAMP OR A BURNDY GAR 3900BU SERIES CLAMP ONLY, NO SUBSTITUTES ACCEPTED.



1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800



SB13
**CARILLON
PT**

2000 CARILLON POINT
KIRKLAND, WA 98033

EXISTING
ROOFTOP

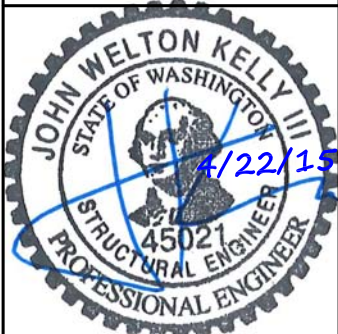
PROJECT NO: 90140.001

CHECKED BY: LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

B&T ENGINEERING, INC.



IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

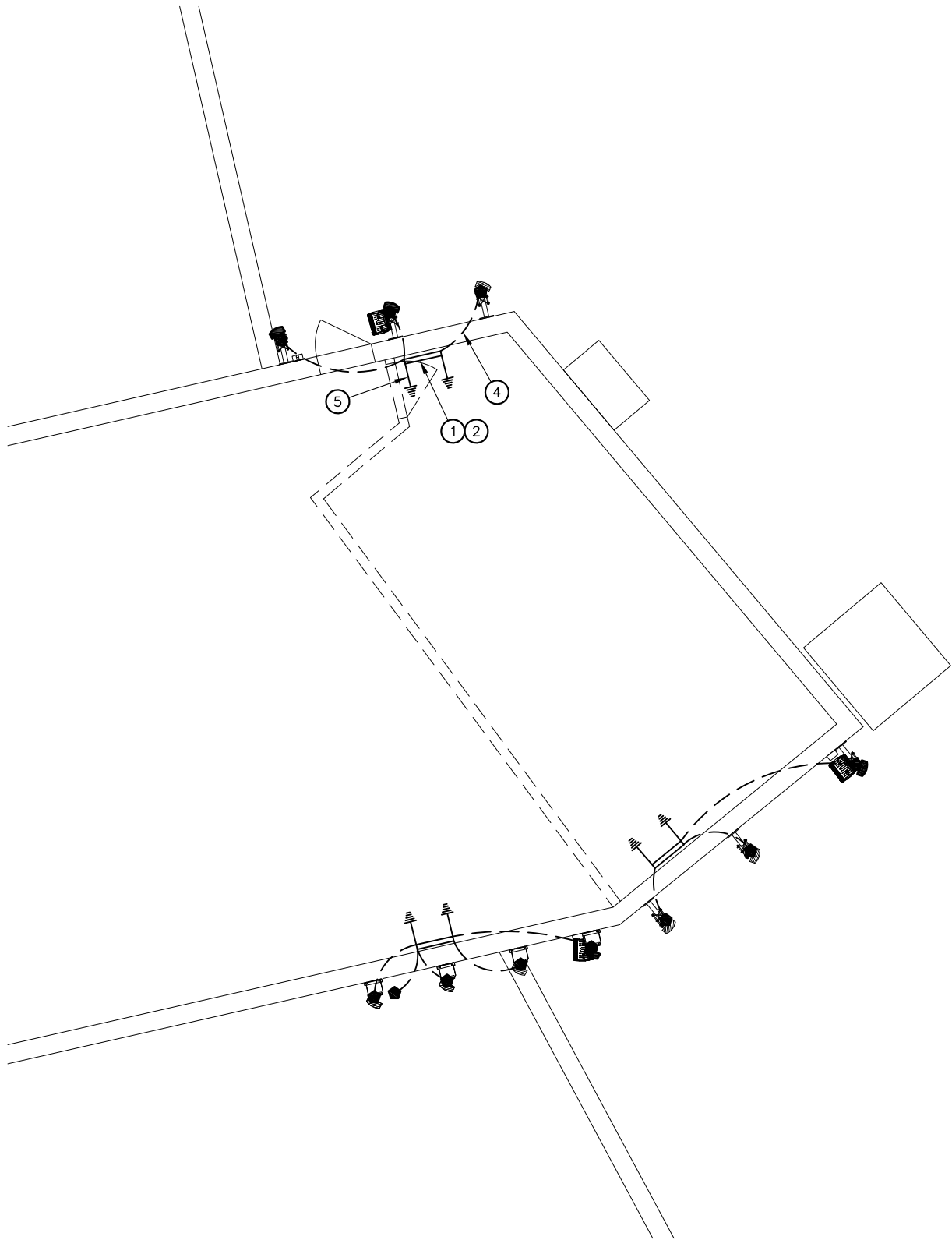
SHEET NUMBER:

G-1

REVISION:

4

90140_Carillon_PT_111462.dwg -- SheetG-2 -- User: mweasel -- Apr 22, 2015 -- 4:18pm



1 GROUNDING PLAN
SCALE: N.T.S.



GROUNDING NOTES

- ① (E) GROUND BUSS BAR, TYP.
- ② (E) MAIN GROUND CONNECTION POINT. (V.I.F.)
- ③ NOT USED
- ④ (E) #2 STRANDED GREEN INSULATED COPPER GROUNDING LEAD, TYP. (V.I.F.)
- ⑤ PROPOSED #2 STRANDED GREEN INSULATED COPPER GROUNDING LEAD, TYP.

GROUNDING NOTES

- ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL INSTALLATION AND CONSTRUCTION MAY VARY DUE TO SITE SPECIFIC CONDITIONS.
- GROUND ALL ANTENNA BASES, FRAMES, CABLE RUNS AND OTHER METALLIC COMPONENTS USING GROUND WIRES AND CONNECT TO SURFACE MOUNTED GROUND BARS. FOLLOW ANTENNA AND BTS MANUFACTURER'S PRACTICES FOR GROUNDING REQUIREMENTS. GROUND COAX SHIELD AT BOTH ENDS AND EXIT FROM TOWER OR POLE USING MFR'S PRACTICES.
- ALL GROUND CONNECTIONS SHALL BE CADWELD. ALL WIRES SHALL BE COPPER THNN/THWN. ALL GROUND WIRE SHALL BE GREEN INSULATED WIRE ABOVE GROUND.
- CONTRACTOR TO VERIFY AND TEST GROUND TO SOURCE. GROUNDING AND OTHER OPERATIONAL TESTING WILL BE WITNESSED BY AN AT&T WIRELESS, LLC. REPRESENTATIVE.
- REFER TO DIVISION 16 GENERAL ELECTRIC; GENERAL ELECTRICAL PROVISION AND COMPLY WITH ALL REQUIREMENTS OF GROUNDING STANDARDS.
- ELECTRICAL CONTRACTORS TO PROVIDE DETAILED DESIGN OF GROUNDING SYSTEM, AND RECEIVE APPROVAL OF DESIGN BY AUTHORIZED AT&T WIRELESS, LLC. REPRESENTATIVE, PRIOR TO INSTALLATION OF GROUNDING SYSTEM. PHOTO DOCUMENT ALL CADWELDS AND GROUND RING.
- NOTIFY CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES INSTALLING GROUNDING SYSTEM DUE TO SITE SOIL CONDITIONS.

GROUNDING ROD NOTES

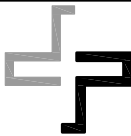
- ELECTRICAL CONTRACTOR SHALL ORDER GROUND RESISTANCE TESTING ONCE THE GROUND SYSTEM HAS BEEN INSTALLED; A QUALIFIED INDIVIDUAL, UTILIZING THE FALL OF POTENTIAL METHOD, SHOULD PERFORM THE TEST. THE REPORT WILL SHOWN THE LOCATION OF THE TEST AND CONTAIN NO LESS THAN 9 TEST POINTS ALONG THE TESTING LINE, GRAPHED OUT TO SHOW THE PLATEAU.
- POINT GROUND TEST OR 3 POINT 62% TESTS WILL NOT BE ACCEPTED AS ALTERNATIVES TO THE AFOREMENTIONED GROUND TESTS. TEST SHALL BE PERFORMED WHILE THE COUNTERPOISE IS ISOLATED FROM THE A/C SYSTEM GRIDS AND EXISTING COMMUNICATIONS FACILITY.

LEGEND

- ⊗ COPPER GROUND ROD
- ⬢ GROUND INSPECTION WELL
- ⬢ COMPRESSION LUG
- CADWELD CONNECTION
- MECHANICAL CONNECTION
- — — GROUND WIRE
- |||| — VERIFY & TIE INTO EXISTING GROUNDING SYSTEM



1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800



1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

SB13
**CARILLON
PT**

2000 CARILLON POINT
KIRKLAND, WA 98033

EXISTING
ROOFTOP

PROJECT NO: 90140.001

CHECKED BY: LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

B&T ENGINEERING, INC.



IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

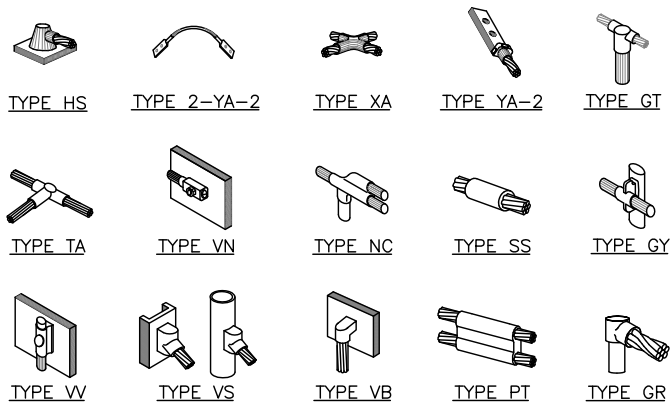
SHEET NUMBER:

G-2

REVISION:

4

90140_Carillon_PT_111462.dwg - SheetG-3 - User: mwsel - Apr 22, 2015 - 4:18pm



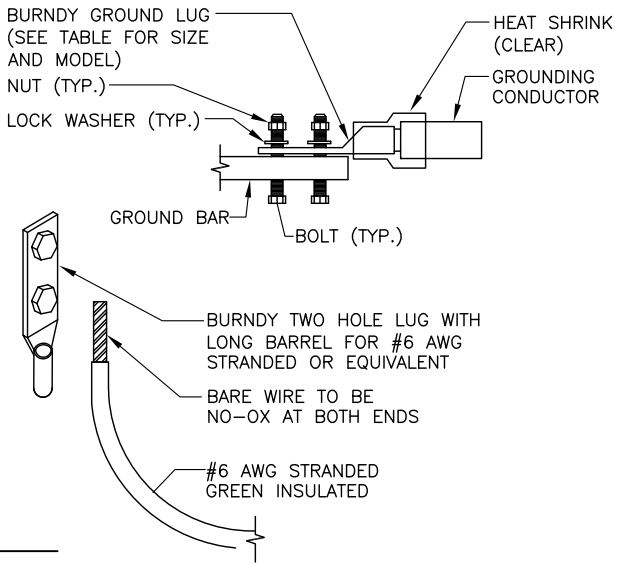
NOTE:
ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.

1 CADWELD GROUNDING CONNECTIONS

SCALE: N.T.S.

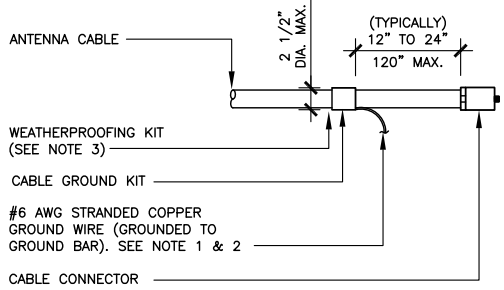
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	1/2" - 16 NC S 2 BOLT

- NOTES:
- ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.
 - COPPER SHIELD, ANTIOX, CR NO-OX OR EQUIVALENT SHALL BE PLACE WHERE ALL DISSIMILAR METALS CONNECT.
 - ALL LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.



2 MECHANICAL LUG CONNECTION

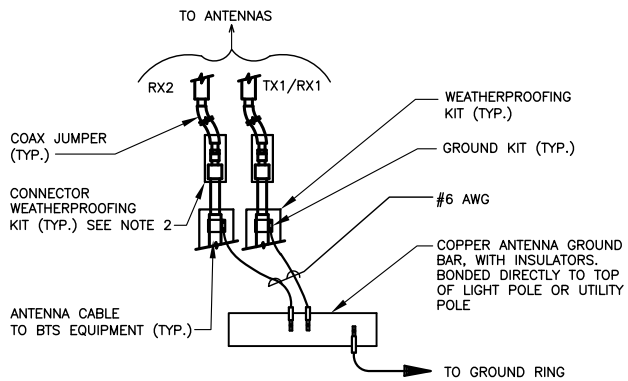
SCALE: N.T.S.



- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
- GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
- WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

3 CABLE GROUND KIT CONNECTION

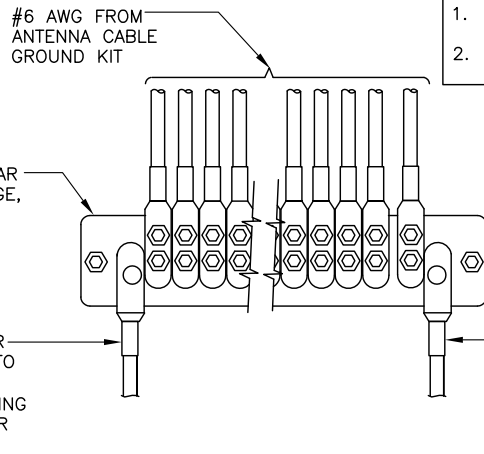
SCALE: N.T.S.



- NOTES:
- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
- WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

4 GROUND CABLE CONNECTION

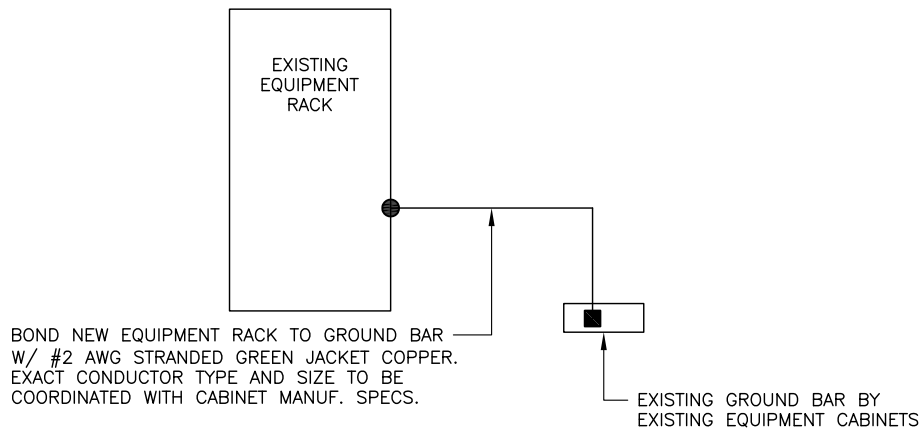
SCALE: N.T.S.



- NOTES:
- ANTENNA GROUNDING BARS NOT TO USE INSULATORS.
 - GROUND BARS AT BOTTOM OF TOWERS SHALL ONLY USE EXOTHERMIC WELDS.

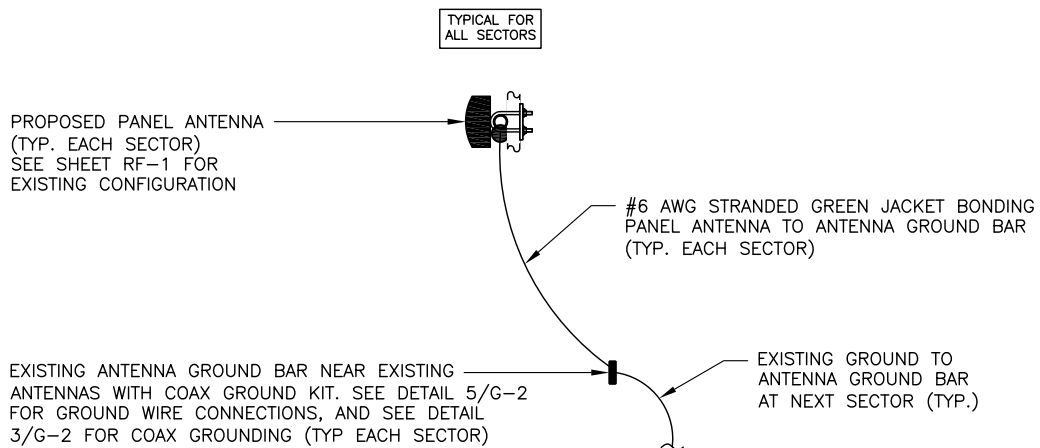
5 GROUNDWIRE INSTALLATION

SCALE: N.T.S.



6 TYPICAL EQUIPMENT AREA GROUNDING PLAN

SCALE: N.T.S.



7 TYPICAL ANTENNA GROUNDING PLAN

SCALE: N.T.S.



1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800



1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

SB13 CARILLON PT

2000 CARILLON POINT
KIRKLAND, WA 98033

EXISTING
ROOFTOP

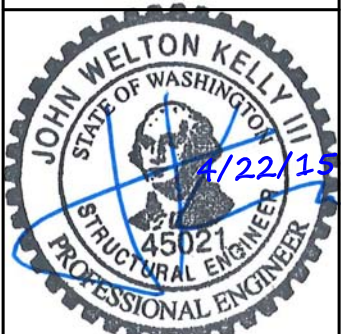
PROJECT NO: 90140.001

CHECKED BY: LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

B&T ENGINEERING, INC.



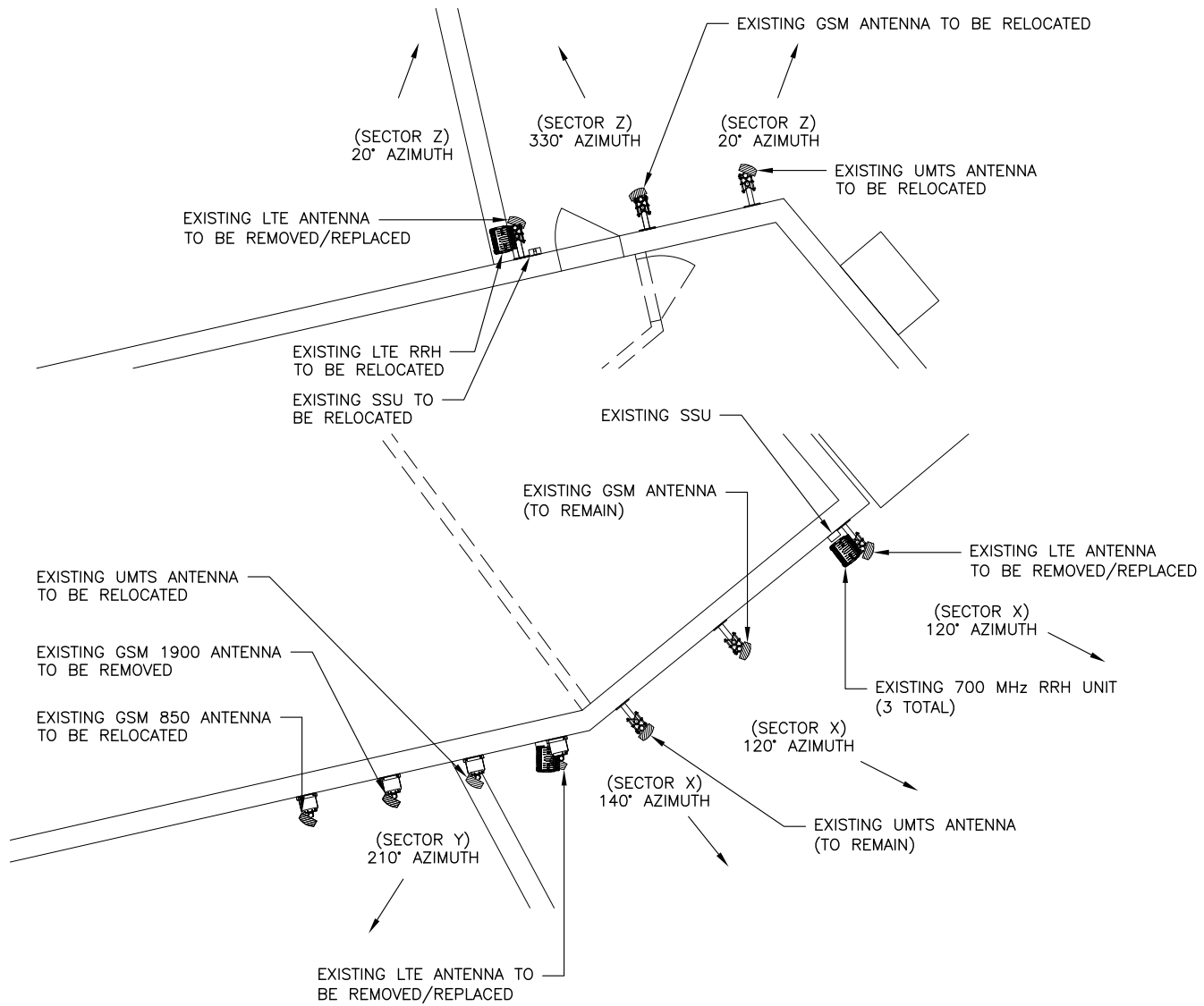
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: REVISION:

G-3 4

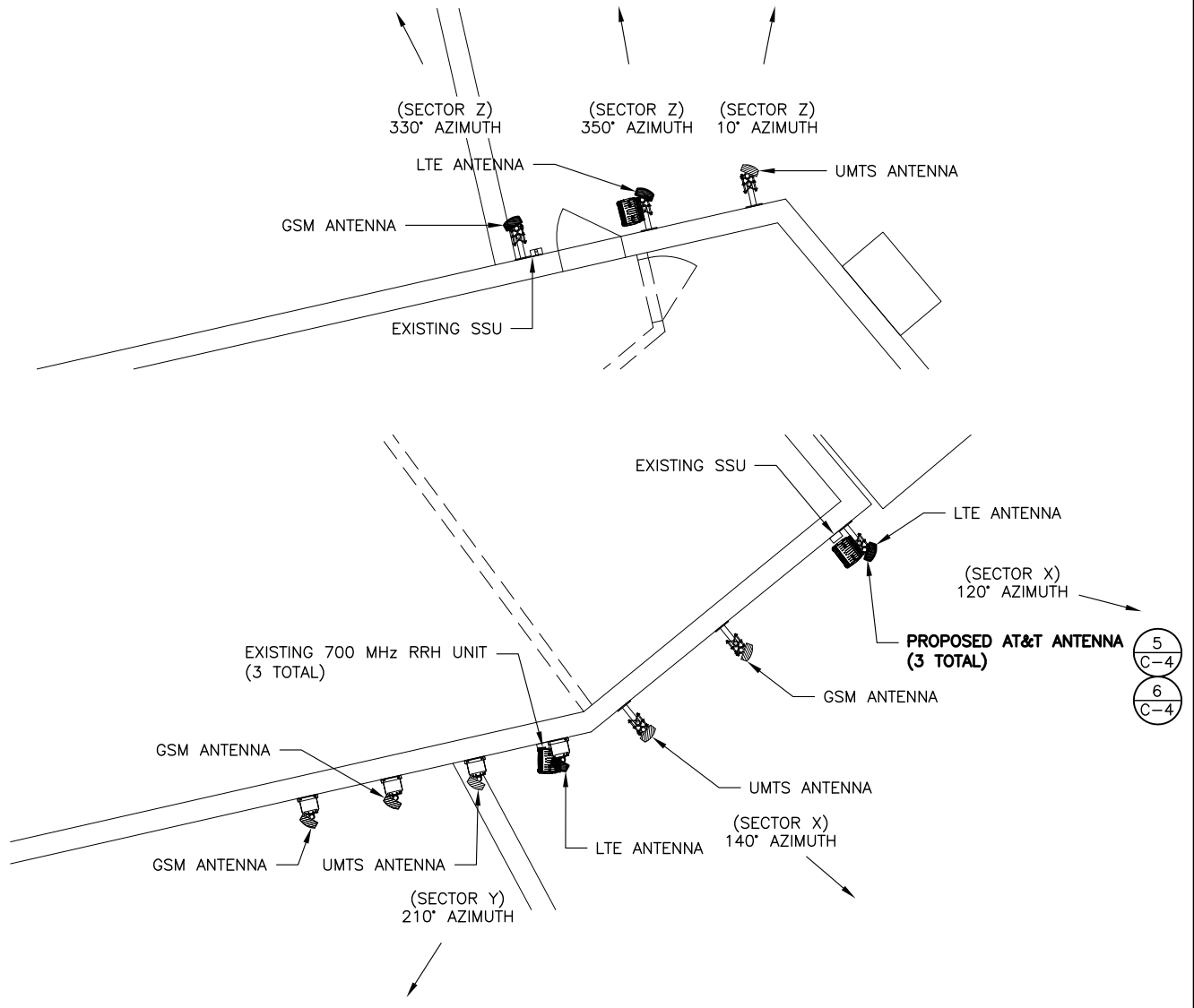
90140_Carillon_PT_11462.dwg - SheetRF-1 - User: mwesell - Apr 22, 2015 - 4:18pm

EXISTING ANTENNA CONFIGURATION AND SCHEDULE													
SECTOR X	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED
LTE 700	120°	65°-0"	1	KMW	AM-X-CD-16-65-00T-RET	4'	0'	YES	-	1	FIBER	315'	NO
GSM 850	120°	65°-0"	1	KATHREIN	742-264	0'	-3'	YES	(2) CS72993.08	2	7/8"	190'	YES
GSM 1900						0'		YES					
UMTS 850	140°	65°-0"	1	KATHREIN	742-264	3'	-3'	YES	(2) LGP 21401	2	7/8"	190'	YES
UMTS 1900						0'		YES					
SECTOR Y	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED
LTE 700	210°	65°-0"	1	POWERWAVE	P65-17-XLH-RR	6'	2'	YES	-	1	FIBER	315'	NO
UMTS 850	210°	65°-0"	1	KATHREIN	742-264	8'	0'	YES	(2) LGP 21401	2	7/8"	190'	YES
UMTS 1900						4'		YES					
GSM 1900	210°	65°-0"	1	POWERWAVE	7721	3'	0'	YES	(2) CS72993.08	2	7/8"	190'	YES
GSM 850	210°	65°-0"	1	KATHREIN	739-684	7'	0'	YES	-	-	-	-	NO
SECTOR Z	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED
LTE 700	20°	65°-0"	1	KATHREIN	80010764	3'	2'	YES	-	1	FIBER	315'	NO
GSM 850	330°	65°-0"	1	KATHREIN	742-264	8'	0'	YES	(2) CS72993.08	2	7/8"	190'	YES
GSM 1900						4'		YES					
UMTS 850	20°	65°-0"	1	KATHREIN	742-264	8'	4'	YES	(2) LGP 21401	2	7/8"	190'	YES
UMTS 1900						4'		YES					



1 EXISTING ANTENNA ORIENTATION
SCALE: N.T.S.

FINAL ANTENNA CONFIGURATION AND SCHEDULE																										
SECTOR X	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	RRH'S QTY	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED												
LTE 700	120°	65°-0"	1	ALU AA	3JR52702AAAA	4'	0'	YES	-	1 (INT) 1 (EXT)	1	FIBER	315'	NO												
LTE 1900						3'		YES																		
GSM 850						0'		YES																		
GSM 1900	120°	65°-0"	1	KATHREIN	742-264	0'	-3'	YES	(2) CS7993.08	-	2	7/8"	190'	YES												
UMTS 850						0'		YES																		
UMTS 1900						3'		YES																		
	140°	65°-0"	1	KATHREIN	742-264	3'	-3'	YES	(2) LGP 21401	-	2	7/8"	190'	YES												
						0'		YES																		
SECTOR Y	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	RRH'S QTY	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED												
LTE 700	210°	65°-0"	1	ALU AA	3JR52703AAAA	7'	2'	YES	-	1 (INT) 1 (EXT)	1	FIBER	315'	NO												
LTE 1900						2'		YES																		
UMTS 850						8'		YES																		
UMTS 1900	210°	65°-0"	1	KATHREIN	742-264	4'	0'	YES	(2) LGP 21401	-	2	7/8"	190'	YES												
GSM 1900						210°		65°-0"							1	POWERWAVE	7721	3'	0'	YES	(2) CS7993.08	-	1	7/8"	190'	YES
GSM 850						210°		65°-0"							1	KATHREIN	739 684	7'	0'	YES	-	-	1	7/8"	190'	YES
SECTOR Z	AZIMUTH	RAD CENTER	NUMBER OF ANTENNAS	VENDOR	MODEL	ELEC. TILT	MECH. TILT	RET	TMA	RRH'S QTY	NUMBER OF FEEDERS	FEEDER TYPE	FEEDER LENGTH	DIPLEXED												
GSM 850	330°	65°-0"	1	KATHREIN	742-264	8'	0'	YES	(2) CS7993.08	-	2	7/8"	190'	YES												
GSM 1900						4'		YES																		
LTE 700	20°	65°-0"	1	ALU AA	3JR52703AAAA	2'	2'	YES	-	1 (INT) 1 (EXT)	1	FIBER	315'	NO												
LTE 1900						3'		YES																		
UMTS 850						8'		YES																		
UMTS 1900	20°	65°-0"	1	KATHREIN	742-264	4'	4'	YES	(2) LGP 21401	-	2	7/8"	190'	YES												



2 PROPOSED ANTENNA ORIENTATION
SCALE: N.T.S.



MasTec
Network Solutions

1203 114TH AVENUE SE
BELLEVUE, WA 98058
(305) 599-1800

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

SB13
CARILLON
PT

2000 CARILLON POINT
KIRKLAND, WA 98033

EXISTING
ROOFTOP

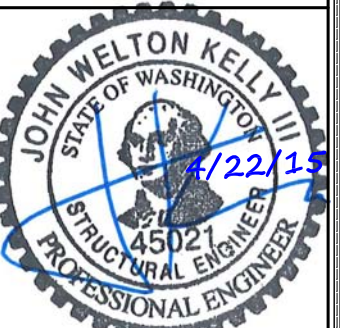
PROJECT NO: 90140.001

CHECKED BY: LRT

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	8/27/14	DGJ	CONSTRUCTION
1	11/14/14	DGJ	CONSTRUCTION
2	1/6/15	DGJ	NEW RFDS
3	1/22/15	DGJ	CONSTRUCTION
4	4/22/15	DGJ	CONSTRUCTION

B&T ENGINEERING, INC.



IT IS A VIOLATION OF LAW FOR ANY PERSON,
UNLESS THEY ARE ACTING UNDER THE DIRECTION
OF A LICENSED PROFESSIONAL ENGINEER,
TO ALTER THIS DOCUMENT.

SHEET NUMBER:

RF-1

REVISION:

4

City of Kirkland
Department of Planning and Community Development

CITY OF KIRKLAND RESPONSE TO SUBSTANTIAL CHANGE CRITERIA

Modifications that do not substantially change the physical dimensions of an existing tower or base station (structure, other than a tower, with wireless facilities in existence at the time of application) will be reviewed by the City as an Eligible Facility Modification. In order to determine that the proposed modification is not a substantial change, the City must receive a response that shows the proposed modification does not exceed any of the individual substantial change items.

The existing facility is a (choose one):

<input type="checkbox"/>	Tower outside the public right-of-way
<input type="checkbox"/>	Tower within the public right-of-way (including utility or light pole)
<input checked="" type="checkbox"/>	Building-mounted facility
<input type="checkbox"/>	Other:

Criteria #1:

- For towers outside of public rights-of-way, the modification does not increase the height of the tower by more than 10%, or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater;
- For those towers in the rights-of-way and for all base stations, it does not increase the height of the tower or base station by more than 10% or 10 feet, whichever is greater.

Existing height of facility	67' 7"
Proposed Height of facility	67' 7"

For staff use only:

Substantial Change:

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>

Criteria #2:

- For towers outside of public rights-of-way, the modification does not protrude from the edge of the tower more than 20 feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater;
- For those towers in the rights-of-way and for all base stations, the modification does not protrude from the edge of the structure more 6 feet.

If tower, existing width of tower at level of antenna mount	N/A
Greatest distance, in feet, between existing structure (tower, utility pole, building, etc.) and proposed antennas	< 1 foot

Antennas are flush mounted to the penthouse.

For staff use only:

Substantial Change:

Yes	
No	X

Criteria #3: If the installation includes new equipment cabinets, the modification does not include the installation of more than 4 equipment cabinets.

Number of new equipment cabinets	None proposed
----------------------------------	---------------

For staff use only:

Substantial Change:

Yes	
No	X

Criteria #4: For all existing facilities, the modification does not include excavation or equipment installation outside the current site of the tower or base station.

Will there be any excavation or equipment installation outside the current site?	No
--	----

For staff use only:

Substantial Change:

Yes	
No	X

Criteria #5: For all existing facilities, the modification does not defeat the existing concealment elements of the tower or base station.

Please describe any existing and proposed concealment elements:
Antennas are flush mounted and will be painted to match the penthouse. The new antennas will use the same methods of concealment.

For staff use only:
Substantial Change:

Yes	
No	X

Criteria #6: For all existing facilities, the modification does not violate any of the conditions of approval (besides modification allowed under criteria #1-4) associated with prior approval(s).

Please describe how the modification will not violate any conditions of approval associated with the prior approval:
The number of antennas will not increase. The location of the antennas will not change.

For staff use only:
Substantial Change:

Yes	
No	X